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ABSTRACT

Designed to develop 12th-grade multiple competencies courses, this curriculum prepares the student to assist a physician, dentist, or other health professional with the management of a medical office and to perform basic health services procedures. Course descriptions are provided for the two courses in the curriculum: medical services assistant (full year, one credit) and medical services assistant office procedures and work experience (two semesters, half credit each). The content of the medical services assistant course is also outlined. Fourteen lesson plans are provided. Each lesson plan consists of these components: list of competencies, introduction, content outline, evaluation and feedback suggestions, list of materials needed, and supplemental materials as required--visual aids for the teacher, evaluation sheets, quizzes, handouts, and homework assignments. Lesson topics include measuring temperatures, measuring and recording oral temperatures, cleaning thermometers, measuring pulse and respiration, measuring and recording a radial pulse, measuring blood pressure, measuring and recording blood pressure, special senses: the eye, Snellen eye screening, measuring height and weight of an adult, measuring the height and weight of an infant, testing blood for glucose, testing urine for glucose and acetone, and testing stool for occult blood. (YLB)

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MEDICAL SERVICES ASSISTANT CURRICULUM

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MEDICAL SERVICES ASSISTANT

INTRODUCTION:

The Medical Services Assistant curriculum was designed to develop 12th grade multiple competencies courses. This curriculum prepares the student to assist a physician, dentist, or other health professional with the management of a medical office and to perform basic health services procedures.

STUDENT QUALIFICATIONS:

The recommended student qualifications are: 16 years of age by December of the school year, a physical examination with proof of immunizations. The student must also have the prerequisite of Keyboarding 1 or Personal Typing and must be concurrently enrolled in both the Medical Services Assistant and Medical Services Assistant Office Procedures courses.

COURSES

The Medical Services Assistant curriculum consists of two courses.

1. The Medical Services Assistant course is a full year, one credit course taught by a Health Occupations teacher.
The classroom and clinical course content includes; human anatomy and physiology, major diseases, CPR, First Aid, and selected skill competencies required in a physician's or dental office.

INTRODUCTION: MEDICAL SERVICES ASSISTANT cont.

Methods of instruction are: lecture and class discussions, guest lectures, films, overhead transparencies, flash cards, field trips, reading and homework assignments and demonstration of skills.

Evaluation methods and special characteristics of instruction are listed in the attached Medical Services Assistant course description.

2. The Medical Services Assistant Office Procedures course is a half credit course taught in the first semester by a business teacher. During the second semester, the student will receive a half credit for The Medical Services Assistant Work Experience course, coordinated by the business teacher with various medical offices or facilities in the community.

Methods of evaluation and special characteristics of instruction are written in the attached Medical Services Office Procedures and Work Experience course descriptions.

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MEDICAL SERVICES ASSISTANT COURSE DESCRIPTION

COURSE TITLE: Medical Services Assistant--Office Procedures

DEPARTMENT: Business

PREREQUISITE: Keyboarding I or Personal Keyboarding
Student must be enrolled in Medical Services Assistant (Health Occupations) Course

CREDIT: 1/2

DESCRIPTION:

Medical Services Assistant-- Office Procedures is the office practice training program to prepare Health Occupations students for job-entry level positions in health related fields in a medical office, dental office, a hospital or an extended care facility. With the new skills offered for this course, such as transcription, calculators, filing photocopying, computer data entry and retrieval and various other skills, the students will be able to apply them to a medical office situation.

COMPETENCIES:

The student will:

1. File records using both the alphabetical and numerical systems.
2. Utilize correct telephone techniques when using a business telephone.
3. Schedule appointments on a standard appointment ledger.
4. Compile registration and history records.
5. Type letters of consultation, collection, appointment and recall.
6. Describe and complete basic insurance forms accurately and neatly.
7. Operate calculators for figuring and maintaining a bookkeeping system.
8. Write checks, deposit slips and receipts.
9. Define pronounce and spell 400 key medical terms used in the medical field.

MSA OFFICE PROCEDURES COURSE DESCRIPTION cont.

10. Discuss facts and background information that pertains to local, state and federal agencies, hospitals, and extended care facilities.

11. List and demonstrate qualities which are essential in the world of work.

12. Demonstrate communication skills necessary for the work place.

13. Discuss and demonstrate good work habits.

14. List the importance of individual and group duties and responsibilities to the total office output.

15. Demonstrate computer skills on the IBM-PC.

16. Explore career opportunities and job descriptions in relation to the student's interests and aptitudes.

18. Write a letter of application, resume, and job application form completing all necessary information and meeting standards for neatness and accuracy.

19. Participate in a job interview.

COURSE CONTENT:

Week One -- Introduce course objectives and explore the various careers available in the health field--Unit 1, pgs. 13-44 in DIVERSIFIED HEALTH OCCUPATIONS text. Also list and discuss qualities which are essential in the world of work, ie. good work habits, communication skills, personality, ethics, etc.

Discuss the need for good spelling and word usage. Students will receive 25 new spelling words a week for the duration of the course. There will be a test every Friday. Words will be taken from THE MEDICAL & HEALTH SCIENCE WORD BOOK. Words will be reviewed so that students will know the pronunciations and word usage. All words misspelled on the test will have to be written or typed 10 times each for homework in order to maintain the grade received on the test--if this is not done, test grades will be downgraded by a grade.

MSA OFFICE PROCEDURES COURSE DESCRIPTION cont.

Weeks Two and Three -- Introduce filing using the alphabetical system--Unit 19:1-19:1A, pgs. 470-475 in the text and through use of the correlating workbook provided with the text for homework assignments. Students will also be made aware of the numerical systems used in many offices as well as the types of equipment and supplies. Evaluation tests will end each section.

Weeks Four and Five -- Instruct students how to operate a ten-key calculator by touch and to solve basic math by using addition, division, percentages, fractions and decimals. Students will use the supplementary text; SOLVING BUSINESS PROBLEMS ON THE ELECTRONIC CALCULATOR. Students will transfer skills; maintaining a bookkeeping system, writing checks, balancing a checkbook, writing deposit slips, receipts and clients' ledgers. The latter material will be taken from the textbook Units 19:7-19:8C pgs. 496-502. Materials will be graded for accuracy, neatness and completeness.

Week Six -- Present appropriate telephone techniques for answering, speaking, listening, giving and receiving information. Students will be made aware of specialized telephone systems and services currently in use. Students will obtain information from text, Units 19:2-19:3 and use the correlating workbook pages assigned for practice in handling calls and appointments. An evaluation test will be given at the end of the unit on communication information and worksheets will be graded for accuracy, neatness and completeness.

Weeks Seven through Ten -- Students will complete a practice set on MEDICAL TYPEWRITING by Gregg Division, McGraw Hill Book Co., containing various forms relating to health care, ie. patient history, desk reference cards, insurance forms (Blue Shield, Medicare, Medicaid, Worker's Compensation and individual insurance), accident reports, medical reports, hospital admission records, group and individual insurance forms, attending physician's statement, nursing home admission records and patient's registers. Students will be required to follow written directions with the help of instructor for clarification. The packet contains 20 projects relating to health facilities.

MSA OFFICE PROCEDURES COURSE DESCRIPTION cont.

Week Eleven and Twelve -- Instruct students on data entry and retrieval on IBM-PC converting inventories, check/bank reconciliation statements, statements of accounts, etc. Students will use MICROCOMPUTER ACTIVITIES FOR OFFICE PROCEDURES (selected projects).

Week Thirteen -- Instruct on how to operate a transcriber and stress the importance of producing a mailable copy. Students will use the prerecorded tapes, MEDICAL OFFICE PROCEDURES, to transcribe material dictated concerning letters to patients and reports on patients by doctors. Students will be graded on their ability to transcribe the material accurately and neatly for mailable copy.

Weeks Fourteen and Fifteen -- Present to the students, job-seeking skills, writing a letter of application, preparing a resume, completing job applications and participating in a job interview. Students will use information from Units 20: 1-20:3, pgs. 504-513 in their text and workbook related activities.

Week Sixteen -- Review with students their readiness for work in the field.

Show 6 films during the course of the semester on the following topics: telephone skills, stress on the job, non-defensive communication, climate in the organization, difficult people to work with, and the interview.

MATERIALS:

Required text:

DIVERSIFIED HEALTH OCCUPATIONS, 2nd ed., Louise Simmers, Delmar Publishers Inc., New York, 1988.

MEDICAL TYPEWRITING, 2nd ed., Patsy C. Smith, McGraw-Hill Book Company, Gregg Division, 1988.

MICROCOMPUTER ACTIVITIES FOR OFFICE PROCEDURES, South-western Publishing Co., 1986

MSA OFFICE PROCEDURES COURSE DESCRIPTION cont.

Other Resources:

MODERN TALKING PICTURE--FILMS: Telephone Skills: Courtesy on the Line; Managing Stress on the Job; Communicating Non-Defensively; Working With Difficult People; The Interview.

THE MEDICAL & HEALTH SCIENCE WORD BOOK, 2nd ed., Ann Roe-Hafer, Houghton Miffin, Boston, 1982

MEDICAL OFFICE PROCEDURES DICTATION, 2nd ed., Gregg Division, McGraw-Hill Book Company, Hightstown, NJ, 1981.

SPECIAL CHARACTERISTICS OF INSTRUCTION:

Although the entire class will be in a group for discussion segments, there will be flexible movement of class when students are working on individual projects working at their own pace--the teacher will be giving individual instruction when requested at that time.

STUDENT EVALUATION PLAN:

All basic grading is done throughout the course either objectively or subjectively based on 100 points.

Students will submit end of course evaluation for effective planning.

Students will keep course material in folders on file in the classroom. These folders will contain all tests taken and evaluation forms concerning their work throughout the course. The purpose for this record keeping will be so that materials will be available for quick reference as study guides for personal improvement or for comprehensive tests at the end of the semester.

COURSE TITLE: Medical Services Assistant--Work Experience

DEPARTMENT: Business

PREREQUISITE: Student must be enrolled in Medical Services Assistant Office Procedures Course

CREDIT: 1/2

DESCRIPTION:

Medical Services Assistant--Work Experience is a program for students enrolled in the health occupations field curriculum. Through a cooperative arrangement between the school and the employer, the student will receive classroom instruction in school and apply the skills learned to related on-the-job training in a medical facility. The student will be placed at a training station compatible with career interests and skills. In this position, the student will have the opportunity to apply skills, gain responsibility, self-confidence, good working habits, and a knowledge of the medical occupational world.

There will be specific training plans for 45 hours of unpaid on site experience - developed by the coordinator and employer. Students will move into a paid experience at the completion of 45 hours of supervised work experience.

COMPETENCIES:

On the job the student will:

1. Experience part-time employment in an occupation related to his or her occupational interest in the health occupation field.

2. Explore opportunities of the occupation at the job training station.

3. Demonstrate good safety practices.

4. Communicate clearly and get along with co-workers.

5. Demonstrate skills taught in the classroom by applying them at the work site.

6. Demonstrate satisfactory employability traits on the job.

MSA WORK EXPERIENCE COURSE DESCRIPTION cont.

COURSE CONTENT:

1. The student will meet with the coordinator and the health occupations teacher concerning a job opening to get a clear understanding of the program and to see if skills and interest are met.

2. Students will fill out an application for work experience and have it signed by a parent and the coordinator.

3. The student will complete a contract between the employer and the student. The contract will be signed by the student, parent and coordinator and will be kept on file by the coordinator.

4. The student will work at the job completing satisfactorily all job assignments.

5. The student will review the evaluation received by the employer with the coordinator each quarter.

6. The student will complete the related Medical Services Assistant--Office Work course content during school hours. (See Medical Services Assistant--Office Procedures curriculum).

MATERIALS: (See forms attached)

-- WORK EXPERIENCE APPLICATION

-- CONTRACT FOR WORK EXPERIENCE

-- STUDENT TRAINING STATION PROGRESS REPORT (EVALUATION)

-- JOB PROFILE (TO BE COMPLETED BY THE STUDENT AT THE END OF PROGRAM)

-- TRAINING SITE WORK EXPERIENCE PLANS (NEEDED FOR EACH JOB SITE--TO BE DEVELOPED BY TEACHER AND EMPLOYER)

MSA WORK EXPERIENCE COURSE DESCRIPTION cont.

SPECIAL CHARACTERISTICS OF INSTRUCTION:

1. Be dismissed early from school (if schedule permits) thereby allowing time to work from 3-4 hours in the afternoons for a total of 45 hours.

2. Receive school credit toward graduation.

3. Be supervised by the school coordinator and the employer.

4. Receive an evaluation, submitted by the employer, rating his or her job progress and performance.

5. Will move into paid work experience after 45 hours on site experience.

STUDENT EVALUATION PLAN:

Students will submit weekly job training site evaluation sheets reflecting the various duties performed that week.

Employers will submit evaluation forms each quarter of students clerical abilities. (See form attached)

Students will keep work experience folders on file in the classroom. These folders will contain evaluation sheets submitted by the employers as well as job training site plans which will reflect the various job specifications.

MEDICAL SERVICES ASSISTANT--BUSINESS OFFICE EDUCATION
APPLICATION

Date_____

Homeroom_____

Name_____ Age _____ Social Security Number_____
(last) (first)

Address_____ Phone Number _____

Name of Parent or Guardian _____

Father's Place of Employment _____

Mother's Place of Employment _____

Year of Graduation _____ Do you have transportation? _____

What are your plans following graduation? (check one)

Further education _____ What type? _____

Employment _____ What kind of job? _____

Other? _____ Please specify _____

BUSINESS COURSES TAKEN AND GRADES RECEIVED

(1) _____Grade _____ (4) _____Grade _____

(2) _____Grade _____ (5) _____Grade _____

(3) _____Grade _____ (6) _____Grade _____

Do you have a job? _____ _____ If yes, what do you do?
yes no

JOB_____AT_____

Address _____Supervisor's Name_____

Pay per hour _____ Number of Hours per week _____

PREVIOUS WORK EXPERIENCE (Any type)--(job, address, duties)

(1) _____

(2) _____

CLASS PERIOD_____

CONTRACT FOR MEDICAL ASSISTANT WORK EXPERIENCE PROGRAM

STUDENT_____ Date_____

TRAINING AGENCY_____ Supervisor_____

ADDRESS_____ Telephone_____

TENTATIVE SCHEDULE OF WORK:

			TOTAL HOURS TO BE WORKED
Monday		to	
Tuesday		to	
Wednesday		to	
Thursday		to	
Friday		to	
Saturday		to	
Sunday		to	

Expected Hours of Work per Week:_____

This training program in cooperative work experience education is continued throughout the school year with an average minimum of fifteen (15) hours per week suggested for the work experience. We recommend consultation regarding maximum number of hours worked.

The training agency agrees to pay the trainee at an agreed hourly wage. The employer may raise the hourly pay of the trainee without approval of the coordinator.

_____,(student) agrees to enter into this training program with_____(training agency) and to render his/her best efforts at all times. The student agrees to consult his/her coordinator with regard to any complaint he/she may wish to make and will not sever employment with the training agency without first advising the coordinator in regard to such matter. The training agency does reserve the right to discharge the student for any reason which the organization cannot tolerate and the coordinator will be so advised.

Transportation to and from the place of employment will be the responsibility of the parent or the student.

The coordinator agrees to provide for formal classroom instruction when necessary to complement the on-the-job training for the student and to serve as the liaison for all parties concerned with this contract.

Student's Signature:_____ PHONE_____

Parent's Signature:_____

Supervisor:_____ PHONE_____

Teacher Coordinator:_____ PHONE_____

Date Hired:_____

Most Desirable Time to Visit_____

MEDICAL SERVICES ASSISTANT
BUSINESS OFFICE EDUCATON PROGRAM
STUDENT TRAINING STATION PROGRESS REPORT

_____
Name of Student

_____
Training Station

_____
Period Covered

TO THE EMPLOYER: In each category place one check mark opposite the phrase which best describes the student-learner most accurately.

ABILITY TO FOLLOW INSTRUCTIONS

____Uses initiative in interpreting and following instructions
____Usually follows instructions with no difficulty
____Follows instructions with some difficulty
____Needs repeated detailed instructions

APPEARANCE

____Exceptionally neat and appropriately dressed
____Satisfactory appearance and dress
____Sometimes neglectful of appearance and dress

ATTITUDE TOWARD WORK

____Shows interest in training and has desire to learn
____Has some interest in the training
____Shows little interest or enthusiasm for the training

ATTENDANCE AND PUNCTUALITY

____Never absent or late without good cause
____Seldom absent or late without good cause
____Occasionally absent or late
____Frequently absent or late

COOPERATION

____Usually cooperates eagerly and cheerfully
____Cooperates willingly when asked
____Cooperates reluctantly

ABILITY TO WORK WITH OTHERS

____Usually poised, courteous and tactful in dealing with people
____Tries to please others
____Sometimes lacks poise and seems indifferent to others

DEPENDABILITY

____Meets obligations with very little supervision
____Meets obligations under careful supervision
____Sometimes fails in obligations even under careful supervision

QUALITY OF WORK

____Does more than required amount of neat accurate work
____Does normal amount of acceptable work
____Does less than required amount of satisfactory work

JOB SKILLS

____Has an above average command of the essential skills and related informati
____Has an acceptable command of the skill and related information
____Lacks in the essential skills and rela information

ATTITUDE TOWARD CONSTRUCTIVE CRITICISM

____Tries harder after criticism
____Listens to criticism
____Pays little attention to criticis
____Resents criticism

OVERALL EVALUATION OF STUDENT

____Outstanding
____Above Average
____Average
____Below Average

PLEASE USE REVERSE SIDE FOR ADDITIONAL COMMENTS

_____
Signature of Training Supervisor

RETURN TO:

JOB PROFILE

To be completed by the student at the conclusion of the work experience program.

PLACE OF EMPLOYMENT _____

LOCATION ON THE JOB (Department) _____

SUPERVISOR'S NAME _____

PEOPLE I WORKED WITH (Names and Titles) _____

_____ _____

_____ _____

_____ _____

DUTIES

_____

_____

_____

THINGS YOU MIGHT WANT TO KNOW ABOUT MY JOB IN GENERAL

_____

_____

_____

SPECIFIC TASKS PERFORMED | SPECIFIC COMPETENCIES NEEDED

_____ _____

_____ _____

_____ _____

EQUIPMENT USED

_____

PARKING ACCOMMODATIONS IN THE VICINITY OF THIS JOB _____ yes _____ no

CLASS OF 19 ____ STUDENT'S SIGNATURE _____

MEDICAL SERVICES ASSISTANT

COURSE DESCRIPTION

COURSE TITLE:	MEDICAL SERVICES ASSISTANT (Health Occupations)
DESCRIPTION:	This competency based course prepares a student for entry-level jobs which require professional, clinical and office management skills in a physician's or dentist's office, medical center, or independent health care agency.
CREDIT:	1 (1 Health Occupations Credit)
LENGTH OF TIME:	TWO SEMESTERS (135 hrs, based on 180 day school year)

COMPETENCIES:

Upon completion of this course, the student will be able to:

1. Discuss medical care before the twentieth century.
2. Demonstrate knowledge of individuals responsible for major contributions to medicine.
3. Identify the lines of authority in a health care facility's organizational chart.
4. Describe present trends in the health care delivery system.
5. List and describe Maslow's hierarchy of needs.
6. Identify objective and subjective reporting.
7. Describe the major functions of ten bodily systems.
8. Label diagrams of cells, tissues, organs, and systems.
9. Identify basic diseases/conditions affecting the bodily systems.
10. Describe the interrelationship of bodily systems.
11. Describe the four food groups.
12. Describe therapeutic diets.

MSA (HEALTH OCCUPATIONS) COURSE DESCRIPTION cont.

13. Explain the principles of medical asepsis and infection control.

14. Demonstrate aseptic hand washing technique.

15. Demonstrate the care, cleaning, wrapping, disinfection or sterilization and storage of medical equipment and instruments.

16. Demonstrate operating an autoclave.

17. Describe basic principles when using chemicals for aseptic control.

18. Demonstrate opening sterile packages without contaminating the contents.

19. Identify patient safety considerations.

20. Describe the principles of body mechanics.

21. Demonstrate the procedure of transferring a disabled patient from a wheelchair to and from an examination table.

22. Identify and demonstrate procedures to position a patient for medical examinations.

23. Describe the equipment used in a physical exam.

24. Demonstrate the procedures of measuring, recording temperature (adult & infant), pulse, respirations, and blood pressure.

25. Demonstrate measuring and recording the height and weight of an adult and infant.

26. Demonstrate the procedure of recording and mounting an electrocardiogram.

27. Demonstrate procedures testing blood, urine and stool.

28. Describe the operation and maintenance of equipment used in a dental office.

29. Describe positioning a patient in a dental chair.

MSA (HEALTH OCCUPATIONS) COURSE DESCRIPTION cont.

30. Demonstrate brushing and flossing techniques.

31. Describe the universal method of identifying teeth.

32. Define disorders, diseases of the teeth, gums and mouth.

33. Describe materials used to make impressions and models.

34. Identify instruments used when setting up an amalgam extraction tray.

35. Identify the instruments used when setting up a a tray for a peridontal probe.

36. Describe the procedure of developing and mounting dental x-rays.

37. Describe dental medical asepsis and sterilization techniques

38. List five causes of shock.

39. Describe the signs and symptoms of shock.

40. Describe the emergency treatment for shock.

41. Identify types of wounds and the treatment of each.

42. Demonstrate application of bandages & dressings to wounds or injuries.

43. Describe the signs and symptoms of an insulin reaction (insulin shock).

44. Describe the emergency treatment for an insulin reaction.

45. Describe epilepsy.

46. Describe the treatment for seizures.

47. Describe the anatomy and physiology of the heart and lungs.

48. Differentiate biological and clinical death.

MSA (HEALTH OCCUPATIONS) COURSE DESCRIPTION cont.

49. List myocardial infarction risk factors.

50. List the signs and symptoms of a myocardial infarction (MI).

51. List the emergency care given a MI victim.

52. Describe causes of sudden death.

53. List the A, B, C's of CPR

54. Demonstrate one rescuer CPR; adult.

55. Demonstrate two-rescuer CPR; adult.

56. Demonstrate Heimlich maneuver; conscious and unconscious adult.

57. Demonstrate CPR; child.

58. Demonstrate Heimlich maneuver; conscious and unconscious child.

59. Demonstrate infant CPR.

60. Demonstrate choking maneuver; conscious unconscious infant.

61. Define, pronounce, and spell the medical terminology, abbreviations, and symbols listed in each lesson.

MSA (HEALTH OCCUPATIONS) COURSE DESCRIPTION cont.

SPECIAL CHARACTERISTICS OF INSTRUCTION

1. Lectures
2. Guest speakers
3. Films, film strips and overhead transparencies
4. Flash cards
5. Reading and homework assignments from the text & workbook, DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers.
6. Field trips
7. Demonstration of skills
8. Role playing
9. Games

STUDENT EVALUATION:

1. Classroom quizzes, tests & exams
2. Individual evaluation of competencies (Evaluation sheets)
3. Written reports

MEDICAL SERVICES ASSISTANT (HEALTH OCCUPATIONS)

COURSE CONTENT:

UNIT I INTRODUCTION TO MEDICAL SERVICES ASSISTANT

WEEK ONE --

1:1 Outline course competencies, goals and student responsibilities.

1:2 Medical care before the twentieth century.

a.) Primitive medicine was closely related to magic and religious rites. Evidence of skull operations and setting of broken bones.

b.) Biblical times - Jewish rites of cleanliness of body and food.

c.) Dark ages - Quackery, practice of medicine without knowledge or skill.

1:3 Individuals responsible for major contributions to medicine.

a.) Hypocrates (460 B.C.) Greek physician, father of medicine.

b.) Rene Leeuwenhoeh (1632-1723) Dutch, discovered microscope, first observed microorganisms.

c.) Louis Pasteur (1822-1895) French biochemist and physicist, discovered pasteurization of milk and a vaccine for rabies.

d.) Joseph Lister (1827-1912) French physician, founded medical techniques.

e.) Robert Koch (1893-1910) German physician, first to isolate disease causing bacteria.

f.) Florence Nightingale (1820-1910) English nurse, founder of modern nursing.

g.) Marie Curie (1867-1934) Polish scientist, first world famous female scientist. Discovered radium.

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

h.) Alexander Fleming (1881-1955) British bacteriologist, discovered penicillin.)

i.) Jonas Salk (1914-) American physician, discovered polio vaccine.

1:4 Health care facility's organizational chart.

a.) Hospital

b.) Medical office

1:5 Trends in present health care delivery system

a.) Cost containment

b.) Diagnostic related groups

1:6 Maslow's hierarchy of needs.

a.) Food, water and oxygen.

b.) Safety and shelter.

c.) Love

d.) Self esteem

c.) Self fulfillment, self actualization

11:7 Objective and subjective reporting.

Define, pronounce, and spell the medical terminology, abbreviations, and symbols listed.

UNIT II HUMAN ANATOMY AND PHYSIOLOGY

WEEK TWO THROUGH WEEK SEVEN --

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

2:1 Cells, tissues and the integumentary system

a.) Cell & tissue physiology

b.) Identification of cell & tissue anatomy

c.) Identification of body planes and cavities.

d.) Diseases - Dermatitis, impetigo, acne, warts & burns.

2:2 The Skeletal System

a.) Main functions of the skeletal system.

b.) Physiology of bones.

c.) Identifcation of skeletal bones.

d.) Diseases - fractures, osteomyelitis, osteoperosis, sprains & arthritis.

2:3 The Muscular System

a.) Main functions of the muscular system.

b.) Physiology of muscles

c.) Identification of muscles.

d.) Diseases - muscular dystrophy, strain & bursitis.

2:4 The Circulatory System

a.) Main functions of the circulatory system.

b.) Anatomy of the heart

c.) Physiology of heartbeat cycle

d.) Identification: major circulatory structures.

e.) Blood (Leukocytes, erythrocytes & platelets)

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

f.) Diseases - myocardial infarction, anemia, aneurysm, thrombus, arteriosclerosis, hypotension, hypertension & vericose vein.

2:5 The Lymphatic System

a.) Main functions of the lymphatic system.

b.) Anatomy & physiology of lymphatic system.

c.) Identification of major lymphatic anatomy.

d.) Diseases - Hodgkin's disease, tonsilitis and splenomegaly.

2:6 The Nervous System

a.) Main functions of the nervous system.

b.) Physiology of central, peripheral and autonomic nervous systems.

c.) Identification of nerve structure & central nervous system

d.) Diseases - Cerebral vascular accident, paraplegia, quadraplegia, hemiplegia, epilepsy, cerebral palsy, encephalitis and meningitis.

2:6A Special Senses; The Eye

a.) Main function of the eye.

d.) Physiology of the eye.

c.) Identification of eye anatomy.

d.) Diseases - myopia, hyperopia, conjunctivitis, glaucoma, cataract and astigmatism.

2:6B Snellen Vision Screening

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

2:6C Special Senses; The Ear

a.) Functions of the ear.

b.) Physiology of the ear.

c.) Identification of ear anatomy.

d.) Diseases - otitis externa, otitis media, conduction hearing loss and sensory hearing loss.

2:7 The Respiratory System

a.) Main functions of the respiratory system

b.) Physiology of the respiratory system

c.) Identification of respiratory anatomy

d.) Diseases - emphysema, asthma, bronchitis, pneumonia, influenza and URI.

2:8 The Digestive System

a.) Main functions of the digestive system

b.) Physiology of the digestive system

c.) Identification of the digestive anatomy

d.) Diseases - ulcers, colitis, cholecystitis, cholelithiasis, appendicitis, hepatitis & cirrhosis.

WEEK EIGHT --

Review for first quarter exam

WEEK NINE THROUGH WEEK TWELVE --

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

2:9 The Urinary System

a.) Main functions of the urinary system.

b.) Physiology of male & female urinary systems.

c.) Identification urinary system's anatomy.

d.) Diseases - nephritis, cystitis, calculi and uremia.

2:10 The Endocrine System

a.) Functions of the endocrine system.

b.) Physiology of the endocrine system.

c.) Identifcation of endocrine system's anatomy.

d.) Diseases - hyperthyroidism, hypothyroidism, goiter and diabetes mellitus.

2:11 The Reproductive System

a.) Functions of the reproductive system.

b.) Anatomy and physiology of the reproductive system.

c.) Identification of reproductive anatomy.

d.) Sexually transmitted diseases - syphilis, gonorrhea, herpes and Acquired Immune Dificiency Syndrome.

e.) Diseases of the reproductive system - epididymitis, prostatic hypertrophy, dysmenorrhea, endometriosis and pelvic inflammatory disease.

2:12 THE FOUR FOOD GROUPS

a.) Milk group & milk products

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

b.) Fruits & vegetables

c.) Bread & cereals

d.) Meats, fish & poultry

2:13 Therapeutic diets.

a.) Regular

b.) Liquid (clear & full)

c.) Soft

d.) Restricted fat

e.) Restricted cholesterol

f.) Bland

g.) Low residue

Define, pronounce, and spell the medical terminology, abbreviations, and symbols listed.

UNIT III MEDICAL ASSISTANT SKILLS

WEEK THIRTEEN & FOURTEEN --

3:1 Principles of medical asepsis and infection control.

a.) Universal precautions

3:2 Aseptic hand washing technique.

3:3 Care, cleaning, wrapping, disinfection or sterilization and storage of equipment and instruments.

a.) Opening sterile packages without contaminating the contents.

3:4 Operating an autoclave.

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

3:5 Basic principles when using chemicals for aseptic control.

WEEK FIFTEEN --

3:6 Patient safety considerations.

a.) Follow procedures.

b.) Patient identification.

c.) Report hazards, unsafe equipment, conditions.

d.) Oxygen safety.

3:7 Body mechanics.

a.) Transferring a disabled patient from a wheelchair to and from an examination table.

3:8 Positioning a patient for medical examinations.

a.) Dorsal recumbant

b.) Horizontal (supine)

c.) Prone

d.) Sims (left)

e.) Knee-chest

f.) Fowler's

g.) Lithotomy

h.) Trendelenburg

i.) Jackknife

3:9 Equipment used in a physical exam.

a.) Ayer blade

b.) Ophthalmascope

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

c.) Otoscope

d.) Percussion hammer

e.) Sigmoid scope

f.) Speculum

g.) Sphygmomanometer

f.) Stethoscope

i.) Tuning fork

WEEK SIXTEEN -- Review for mid term exam.

WEEK SEVENTEEN & EIGHTEEN --

3:1Ø Vital Signs: Measuring and recording temperatures, pulse, respirations (adult & infants) & blood pressure.

3:1ØA Measuring temperatures (theory)

3:1ØB Measuring & recording oral temperatures (skill)

3:1ØC Measuring & recording infant temperatures

3:1ØD Cleaning thermometers

3:1ØE Measuring Pulse & Respirations (theory)

3:1ØF Measuring & recording a radial pulse (skill)

3:1ØG Measuring & recording an apical pulse

3:1ØH Measuring & recording blood pressure (theory)

3:1ØI Measuring & recording blood pressure (skill)

3:11 Measuring and recording the height and weight of an adult.

3:11A Measuring & recording the height & weight of an infant.

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

WEEK NINETEEN --

3:12 Recording and mounting an electrocardiogram.

3:13 Testing blood for glucose level.

3:14 Testing urine for sugar and acetone.

3:15 Testing a stool specimen for occult blood.

Define, pronounce, and spell the medical terminology, abbreviations, and symbols listed.

UNIT IV DENTAL ASSISTANT SKILLS

WEEK TWENTY --

4:1 Operation and maintenance of

a.) Dental light

b.) Dental chair

c.) Air compressor

d.) Oral evacuation system

e.) Assistant's cart

f.) Doctor's cart

g.) Equipment and supplies

4:2 Positioning a patient in a dental chair.

4:3 Brushing and flossing techniques.

4:4 Universal method of identifying teeth.

WEEK TWENTY ONE --

4:5 Disorders, diseases of the teeth, gums and mouth.

a.) Gingivitis

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

b.) Pyorrhea

c.) Stomatitis

d.) Malocclusion

e.) Dental caries

f.) TMJ Temporomandibular Joints

g.) Hepatitis B

h.) AIDS

WEEK TWENTY TWO --

4:6 Materials used to make impressions and models.

a.) Alginate

b.) Rubber-base

c.) Plaster

d.) Stone

e.) Hydrocolloid

f.) Polysiloxane

4:7 Identify instruments used when setting amalgam extraction tray.

a.) Mouth mirror

b.) Explorer

c.) Cotton pliers

d.) Scalers

e.) Excavators

f.) Chisel

g.) Cleoid - Discoid

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

h.) Amalgam instrument

i.) Matrix retainer and band

WEEK TWENTY THREE --

4:8 Instruments used when setting up a a tray for a peridontal probe.

4:9 Developing and mounting dental x-rays.

a.) Pan oral

b.) Trans cranial

c.) Lateral jaw

4:10 Dental medical asepsis and sterilization techniques

Define, pronounce, and spell the medical terminology, abbreviations, and symbols listed.

WEEK TWENTY FOUR -- Review for third quarter exam.

UNIT V BASIC FIRST AID

WEEK TWENTY FIVE --

5:1 Five causes of shock.

a.) Severe trauma (loss of blood/body fluids)

b.) Myocardial infarction

c.) Cerebral vascular accident

d.) Infection

e.) Poisoning (chemicals, gases, alcohol, or drugs)

f.) Asphyxia

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

5:2A Signs and symptoms of shock.

a.) Pale, cyanotic skin

b.) Skin cool & clammy

c.) Pulse is weak & rapid

d.) Respirations are rapid & shallow

e.) Bloodpressure is low or lower than normal

f.) Anxiety, restlessness

g.) Excessive thirst

i.) Generalized weakness

5:2B Emergency treatment for shock.

a.) Check breathing

b.) Control bleeding

c.) Elevate legs (if no leg, spine, head or jaw injury)

d.) Cover to prevent chilling

5:3 Types of wounds.

a.) Abrasion

b.) Incision

c.) Laceration

d.) Puncture

e.) Avulsion

5:3A Application of bandages & dressings to wounds or injuries.

a.) Clean technique

b.) Sterile technique

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

5:4 Signs and symptoms of an insulin reaction (insulin shock).

a.) Muscle weakness

b.) Mental confusion

c.) Restlessness or anxiety

d.) Diaphoresis

e.) Pale, moist skin

f.) Palpitations (irregular heartbeat)

g.) Hunger pangs

5:4A Emergency treatment for an insulin reaction.

a.) Drink OJ with sugar

b.) Eat a piece of candy or teaspoon of granulated sugar.

5:5 Epilepsy.

a.) Petit mal seizure

b.) Grand mal seizure

5:5A Treatment for seizures.

Define, pronounce, and spell the medical terminology, abbreviations, and symbols listed.

UNIT VI CARDIOPULMONARY RESUSCITATION

WEEK TWENTY SIX --

6:1 Review anatomy and physiology of the heart and lungs.

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

6:1A Biological and clinical death.

a.) Clinical death - The heart & respirations have ceased.

b.) Biological death - There is death of brain tissue. No oxygen for 4 to 6 minutes.

6:1B Myocardial infarction risk factors.

a.) Arteriosclerosis

b.) Diabetes

c.) Hypertension

d.) Smoking

e.) Obesity

f.) Lack of exercise

g.) Stress

h.) Heredity

6:1C Signs and symptoms of a myocardial infarction (MI).

a.) Substernal chest pain, pressure or discomfort.

b.) Profuse diaphoresis

c.) Nausea

d.) Pain or numbness in the left arm, neck, jaw, or shoulder(s).

e.) Weakness

f.) Shortness of breath.

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

6:1D Emergency care given a MI victim.

a.) Recognize the symptoms.

b.) Have the victim stop activity and sit or lie down.

c.) If the symptoms persist two minutes or longer, call an ambulance.

6:2 · Causes of sudden death.

a.) Myocardial infarction or cerebral vascular accident.

b.) Electric shock.

c.) Drowning.

d.) Suffocation

e.) Choking

f.) Poisoning

g.) Smoke inhalation

h.) Drug or alcohol over dose

6:2A The A B C's of CPR

a.) A - airway

b.) B - breathing

c.) C - circulation

WEEK TWENTY SEVEN THROUGH THIRTY TWO --

6:8 One rescuer CPR - adult.

a.) Two-rescuer CPR - adult.

MSA (HEALTH OCCUPATIONS) COURSE CONTENT cont.

6:9 Heimlich maneuver; conscious & unconscious adult.

6:10 CPR - child.

6:11 Heimlich maneuver; conscious & unconscious child.

6:12 Infant CPR.

6:13 Choking maneuver; conscious & unconscious infant

Define, pronounce, and spell the medical terminology, abbreviations, and symbols listed.

WEEK THIRTY TWO -- Review for final exam.

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LESSON PLAN: 3:10A

UNIT: III MEDICAL ASSISTANT

TOPIC: MEASURING TEMPERATURES

CLASS: MEDICAL SERVICES ASSISTANT

TYPE OF LESSON: THEORY

COMPETENCIES: After this class the student will be able to:

1. List eight factors which influence body temperature.
2. Identify four types of thermometers.
3. State the normal range for:
    a.) Oral Temperature
    b.) Rectal Temperature
    c.) Axillary Temperature
4. Define, pronounce, and spell; temperature, vital signs, V/S, homeostasis, and axillary.

INTRODUCTION:

It is important for a Medical Services Assistant to be knowledgeable about bodily functions. Some common methods used to see if the body is functioning properly are measuring a patient's temperature, pulse, respirations and blood pressure.

CONTENT: (Pgs. 149 - 152 in text, DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition by Louise Simmers).

I. Definitions

*Vital Signs - *Display flash card

- Means; temperature, pulse, respirations & blood pressure.

- Medical abbreviations: *V/S or TPR & B/P. *(Flash cards)

*Homeostasis - When the body's V/S are within normal limits. (Flash card)

LESSON PLAN, TEMP cont.

II. Factors which influence the body's temperature:

a.) Increase temperature:

- Exercise, digestion, high temperature in the environment, illness, infection, excitement, & anxiety.

b.) Decrease temperature:

- Sleep, fasting, decreased muscle activity, exposure to cold, depression, mouth breathing, & certain illnesses.

III. Types of thermometers (See pg 151 in text)

* Display each thermometer to students

a.) Oral - Mouth

- Long slender bulb, BLUE TIP

b.) Rectal

- Rectum
- Used for infants, confused patients, mouth injuries
- Short, stubby bulb, RED TIP

c.) Security

- Short, rounder bulb,
- Used for children
- Usually has BLUE TIP

d.) Electronic

- Expensive, $300 - $400 Must buy disposable sheaths
- Battery operated, temp obtained in few sec.

LESSON PLAN: TEMPERATURES cont.

- ASEPTIC CONSIDERATION: Plastic disposable sheaths Less chance of contamination

- ASEPTIC CONSIDERATION: NEVER USE ANY THERMOMETER WITH A RED TIP FOR ORAL USE OR BLUE TIP FOR RECTAL USE.

IV. Sites to take body temperatures.

a.) Oral - Mouth, left in place for 3 to 5 minutes.

- Most common, convenient

- Normal oral temp, 98.6°F

- Normal range, 97.6° to 99.6°F

b.) Rectal

- Rectum, left in place for 3 minutes.

- SAFETY CONSIDERATION: INFANTS; INSERT THERMOMETER 1/2 inch. NEVER LEAVE INFANT UNATTENDED WITH THERMOMETER

- Most accurate of all methods

- Normal rectal temp, 99.6° F

- Normal range, 98° to 99.8° F

c.) Axillary

- Armpit, between two folds of skin, for 10 minutes.

- Least accurate of all methods

- used: no rectum, unconscious

LESSON PLAN: TEMPERATURES cont.

- Normal axillary temp, 97.6°F
- Normal range, 96.7° to 98.6°F

EVALUATION & FEEDBACK

Question & answer period

Review with flash cards

Homework assignment 11:2, pgs. 85-86 in DIVERSIFIED HEALTH OCCUPATIONS WORKBOOK

Weekly quiz (Multiple choice, true/false, matching & essay)

MATERIALS NEEDED

Blackboard and chalk

Thermometers: oral, rectal, security and battery.

Plastic sheaths for battery thermometer

Flash cards

Text: DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers

WORKBOOK FOR DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers

LESSON PLAN: 3:10B

UNIT: III MEDICAL ASSISTANT

TOPIC: MEASURING AND RECORDING ORAL TEMPERATURES

CLASS: MEDICAL SERVICES ASSISTANT

TYPE OF LESSON: SKILL

COMPETENCIES:

1. Identify two SAFETY CONSIDERATIONS when measuring an oral temperature.
2. Identify two ASEPTIC CONSIDERATIONS when measuring an oral temperature.
3. Demonstrate measuring and recording an oral temperature (+ or -) two tenths of a degree.

INTRODUCTION:

Measuring an oral temperature will be one of the most common skills a Medical Services Assistant would perform in a physician's office, medical walk-in clinic or HMO facility. This lesson will provide the basic guidelines when measuring and recording an oral temperature.

CONTENT: (pg. 154 in DIVERSIFIED HEALTH OCCUPATIONS text)

I. (For this class, the Thermometer Demonstration model is used. Plans for a thermometer model are included in this lesson plan).

1. Thermometer - Hollow glass tube filled with mercury.
   - Upper end called stem (color coded).
   - Lower end called bulb.

   SAFETY CONSIDERATION: MERCURY IS VERY POISONOUS. SMALL CHILDREN SHOULD HAVE THEIR TEMPERATURE TAKEN RECTALLY WHEN THERE IS A QUESTION THE CHILD MAY BITE & BREAK AN ORAL THERMOMETER.

   - each long line represents one degree

MEASURING & RECORDING ORAL TEMPERATURES cont.

- each short line reads as two tenths of a degree.

- Temperatures are always recorded to the nearest two tenths of a degree.

2. DEMONSTRATION ON THERMOMETER MODEL
(Quiz students individually)

II. DEMONSTRATION: MEASURING AND RECORDING AN ORAL TEMPERATURE

1. Assemble equipment. (See, MATERIALS NEEDED)

2. Wash hands.

3. Identify patient.

4. Ask patient if he/she has eaten, smoked, or drank liquids in the past 15 minutes. Wait 15 minutes if the patient says yes.

5. Pick up thermometer by the upper end (blue tip) and hold securely.
ASEPTIC CONSIDERATION: NEVER HOLD THERMOMETER BY THE BULB. THE BULB END IS PUT INTO THE PATIENT'S MOUTH.

6. Read the thermometer at eye level to see if it is at 96 F or lower.
SAFETY CONSIDERATION: CHECK THE THERMOMETER FOR CHIPS OR CRACKS.

7. Insert the thermometer under the patient's tongue. Instruct the patient to hold it in place with the lips.
SAFETY CONSIDERATION: CAUTION THE PATIENT NOT TO BITE DOWN ON THE THERMOMETER.

8. Leave thermometer in place for three minutes.

9. Remove thermometer by the stem. Wipe toward the bulb with a tissue.
ASEPTIC CONSIDERATION: DO NOT HOLD BY THE BULB END. THE BULB IS CONTAMINATED BY THE PATIENT'S MOUTH.

MEASURING & RECORDING AN ORAL TEMPERATURE cont.

10. Read the thermometer. Record the reading to the nearest 2/10 on paper.

11. If the reading is 97° F or less, reinsert the thermometer in the patient's mouth for 1 to 2 minutes more.

12. Clean the thermometer (Lesson 3:10D). Shake down to 96° F or lower.

13. Check patient for comfort and safety before leaving.

14. Replace all equipment.

15. Wash hands.

16. Report any abnormal readings immediately.

EVALUATION & FEEDBACK

The student will be given an Oral Temperature Evaluation Sheet. The student will practice measuring and recording the oral temperature procedure while a peer reviews and checks off each step. When the student feels he/she is ready, the teacher will perform the final evaluation and sign the evaluation sheet.

Weekly quiz (multiple choice, fill in the blank, matching & essay)

MATERIALS NEEDED

Blackboard and chalk

Thermometer model

Oral thermometers

Thermometer holder with disinfectant solution

Gauze pads or tissues

Trash receptacle

Watch with second hand

MEASURING & RECORDING AN ORAL TEMPERATURE cont.

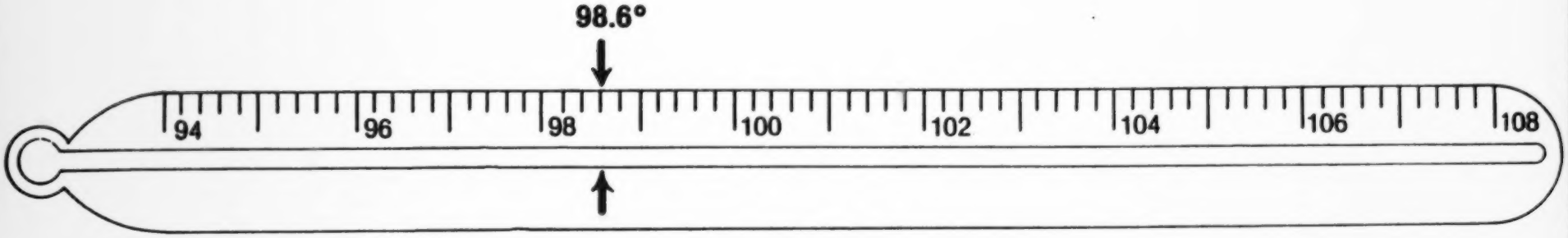
Soapy cotton balls or gauze pads

Pen & paper

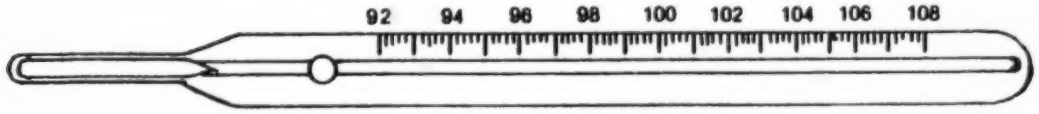
Evaluation Sheet: Measuring & Recording an Oral Temperature

Text: DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers

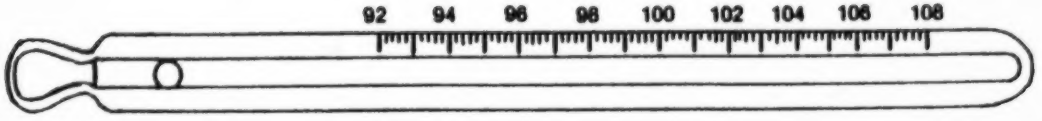
Common Thermometers



Standard Fahrenheit Thermometer



Oral Thermometer



Rectal Thermometer

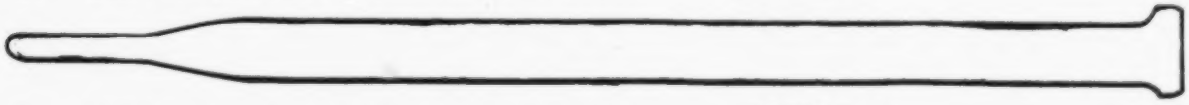
PLANS FOR DEMONSTRATION THERMOMETER MODEL

The purpose of this model is to provide the teacher with a visual aide when assisting students with the procedure of reading a thermometer.

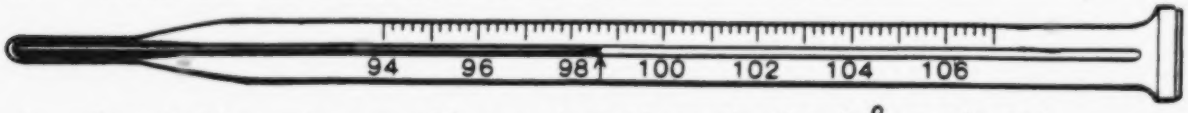
DIRECTIONS:

1. Obtain a piece of white heavy cardboard approximately 32 inches by 11 inches.

2. Draw a picture of a thermometer. FIGURE 1



3. Write in the temperature range. FIGURE 2



4. Carefully cut a small opening through the 94° mark and the 107° mark.

FIGURE 3

5. Sew 30 inch by 3/8 inch white ribbon to a 30 inch by 3/8 inch black ribbon.

6. On the front surface of the thermometer model, thread the white ribbon end into the 107° opening. Thread the black ribbon into the 94° opening.

7. Turn the thermometer model over and tie the ribbon ends together.

8. The teacher can demonstrate various temperature readings by sliding the ribbon either left or right.

MATERIALS NEEDED

1. A piece of heavy cardboard
2. 30 inches by 3/8 inch of white ribbon
3. 30 inches by 3/8 inch dark black ribbon
4. Black magic marker
5. Artist knife or one edge razor
6. Needle and thread

EVALUATION SHEET

MEASURING AND RECORDING ORAL TEMPERATURE

DIRECTIONS: The student will practice the procedure with a peer who will check off each step of the skill. The teacher will evaluate the student's final performance.

CODE: S = SATISFACTORY R = RECHECK

NAME_____ Date_____

	PEER REVIEWER	TEACHER
1. Assembles all equipment		
2. Washes hands		
3. Identifies patient		
4. Explains procedure		
5. Questions patient on eating, drinking or smoking		
6. Wipes thermometer		
7. Checks and reads thermometer		
8. Instructs patient on holding it in mouth.		
9. Leaves in place for 3 minutes.		
10. Removes, wipes & holds for reading.		
11. Reads to nearest 2/10 of a degree		
12. Records correctly		
13. Cleans correctly Wipes with soapy cotton ball Rinses in cool water Shakes down correctly		
14. Replaces all equipment		
15. Washes hands		
16. Recognizes what is an abnormal reading & reports it immediately.		
SIGNATURE		

LESSON PLAN: 3:10D

UNIT: III MEDICAL ASSISTANT

TOPIC: CLEANING THERMOMETERS

CLASS: MEDICAL SERVICES ASSISTANT

TYPE OF LESSON: SKILL

COMPETENCIES: After this class the student will be able to:

1. Demonstrate cleaning glass thermometers according to the procedure taught.

INTRODUCTION: Proper care and cleaning of thermometers is an important measure a Medical Services Assistant uses to prevent the spread of illness and disease from one patient to another. Today's lesson will demonstrate the procedure to clean thermometers in a health care facility.

PROCEDURE: (pg. 152 - 153 in DIVERSIFIED HEALTH OCCUPATIONS text).

1. Assemble equipment.

2. Wash hands

3. Wipe used thermometer once, from the top toward the bulb with a soapy gauze pad or cotton ball. Discard soiled gauze pad in trash can.

   SAFETY CONSIDERATION: INSPECT THERMOMETERS FOR CRACKS OR CHIPS & DISCARD.

   ASEPTIC CONSIDERATION: ROTATE THERMOMETER AND WASH ALL SURFACES.

4. Rinse thermometer with cool water.

   SAFETY CONSIDERATION: USE OF HOT WATER WILL BREAK THERMOMETER.

5. Shake thermometer down to 96° F (35.6°C).

   SAFETY CONSIDERATION: HOLD THERMOMETER SECURELY BETWEEN INDEX FINGER & THUMB. USE SNAPPING MOTION OF WRIST. (LIKE TRYING TO SNAP OFF SOMETHING STICKY.) STAND CLEAR OF FURNITURE.

CLEANING THERMOMETERS LESSON PLAN cont.

6. Place thermometers in a flat container filled with disinfectant solution (usually 70% alcohol).

   ASEPTIC CONSIDERATION: THE THERMOMETER MUST BE COMPLETELY COVERED BY THE SOLUTION.

7. Clean thermometer holder with soap and water.

8. Rinse dry. Place a clean cotton ball in the bottom to prevent breakage. If a flat container is used to store many thermometers line the bottom surface with sterile gauze.

   ASEPTIC CONSIDERATION: SOILED THERMOMETERS MUST SOAK FOR 30 MINUTES IN A DISINFECTANT. REMOVE & WIPE THERMOMETER FROM THE STEM TOWARD THE BULB WITH AN ALCOHOL SWAB. THIS REMOVES ANY SEDIMENT FROM THE THERMOMETER.

9. Rinse thermometer in cool water.

   SAFETY CONSIDERATION: REPEAT INSPECTION OF THERMOMETER FOR CRACKS OR SIGNS OF BREAKAGE.

10. Read thermometer to be sure it is 96° F or lower. Place in clean container.

11. Replace all equipment used.

12. Wash hands.

    *NOTE: THIS PROCEDURE MAY VARY ACCORDING TO AGENCY POLICY.

MATERIALS NEEDED:

Thermometers

Soapy cotton balls or gauze pads

Waste can

Running water

CLEANING THERMOMETERS LESSON PLAN cont.

Thermometer soaking basin with 70% alcohol

Cotton balls or gauze sponges

Thermometer holder

Evaluation Sheet: Cleaning Thermometers

Text: DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers.

EVALUATION & FEEDBACK

The student will be given a Cleaning Thermometer Evaluation Sheet. The student will practice cleaning thermometers while a peer reviews and checks off each step. When the student feels he/she is ready, the teacher will perform the final evaluation.

Questions from this lesson will be included in the weekly quiz.

EVALUATION SHEET

CLEANING A THERMOMETER

NAME _____ DATE _____

DIRECTIONS: The student will practice the procedure with a peer who will check off each step on the EVALUATION SHEET. The teacher will evaluate the student's final performance.

CODE S = SATISFACTORY R = RECHECK

	PEER REVIEWER	TEACHER
1. Assembles equipment		
2. Washes hands		
3. Wipes thermometer from top to bulb with soapy water		
4. Rinses in cool water		
5. Shakes down correctly		
6. Places in container of disinfectant		
7. Soaks thermometer at least 30 minutes		
8. Cleans thermometer holder		
9. Wipes with alcohol swab after soaking		
10. Rinses in cool water		
11. Checks for signs of breakage		
12. Reads to see if it is < 96° F		
13. Places in clean thermometer holder		
14. Replaces all equipment used		
15. Washes hands		
	SIGNATURE	

LESSON PLAN: 3:10E

UNIT: III MEDICAL ASSISTING

TOPIC: MEASURING PULSE AND RESPIRATIONS

CLASS: MEDICAL SERVICES ASSISTANT

TYPE OF LESSON: THEORY

COMPETENCIES: After this class the student will be able to

1. Identify six pulse sites on the body.
2. List the normal pulse range of an infant, child and adult.
3. List the normal respiration range of an infant, child and adult.
4. Define, pronounce and spell pulse, rhythm, tachycardia, bradycardia, carotid, temporal, brachial, radial, femoral, popliteal, dorsalis pedis, dyspena, apnea, Chenye-Stokes respirations and rales.

INTRODUCTION:

A Medical Services Assistant will count a patient's pulse and respirations during the same procedure. The information presented today will assist you when you perform this procedure.

CONTENT: (pgs. 157 - 159 in DIVERSIFIED HEALTH OCCUPATIONS text).

I. *Pulse - Definition (Flash card)

- Pressure of blood pushing against an artery wall.

1. Normal pulse ranges

a.) infant - 100 to 140 beats/min.

LESSON PLAN; MEAS. PULSE & RESP. cont

b.) child (from 1 to 7) - 8Ø to 12Ø beats/min.

c.) adult - 7Ø to 9Ø beats/min.

2. *Tachycardia - (Flash card)
- Rates over 1ØØ beats/min., except in children.

3. *Bradycardia - (Flash card)

- Rates under 6Ø beats/min.

- NOTE: ANY VARIATIONS OR EXTREMES IN HEART RATES ARE REPORTED IMMEDIATELY

4. Rhythm - Regular or irregular.

5. Volume - Strength or intensity.

- Described as strong, weak, thready, bounding.

II. *PULSE SITES - Distribute Handout; Pulse Sites

*HOLD UP Flash cards

1. Temporal - At the side of the forehead

2. Carotid - Side of the neck (used for CPR)

3. Brachial - inner aspect of upper arm

- used when taking B/P

4. Radial - inner aspect of wrist, thumb side

- most frequent site to take pulse

5. Femoral - inner aspect of inner thigh

6. Popliteal - behind knee

7. Dorsalis pedis

- top of foot arch (common site to check circulation of the feet

LESSON PLAN; MEAS. PULSE & RESP.

III. *Respirations Definition (Flash card)

- The process of taking in oxygen (O_2) and expelling carbon dioxide (CO_2) from the lungs and respiratory tract.

- one respiration consists of one inspiration and one expiration.

1. Normal range
   a.) adult, 14 to 22 breaths/minute
   b.) child, 16 to 24 breaths/min
   c.) infant, 30 to 50 breaths/min

2. *Dyspena - (Flash card)
   - difficult or labored breathing

3. *Apnea - (Flash card) - absence of respirations

4. *Cheyne-Stokes respirations - (Flash card)
   - periods of dyspena followed by periods of apnea
   - usually found in dying patients

5. *Rales - (Flash card)
   - Bubbling or noisy sounds caused by fluids or mucus in the lungs.

EVALUATION & FFEDBACK

Question and answer period

Review with flash cards

Homework assignment 11:3, pg 92 & 11:4, pg 94 in DIVERSIFIED HEALTH OCCUPATIONS WORKBOOK.

Weekly quiz (objective, true/false short answer & essay)

LESSON PLAN, MEAS. PULSE & RESP. cont.

MATERIALS NEEDED

Blackboard & chalk

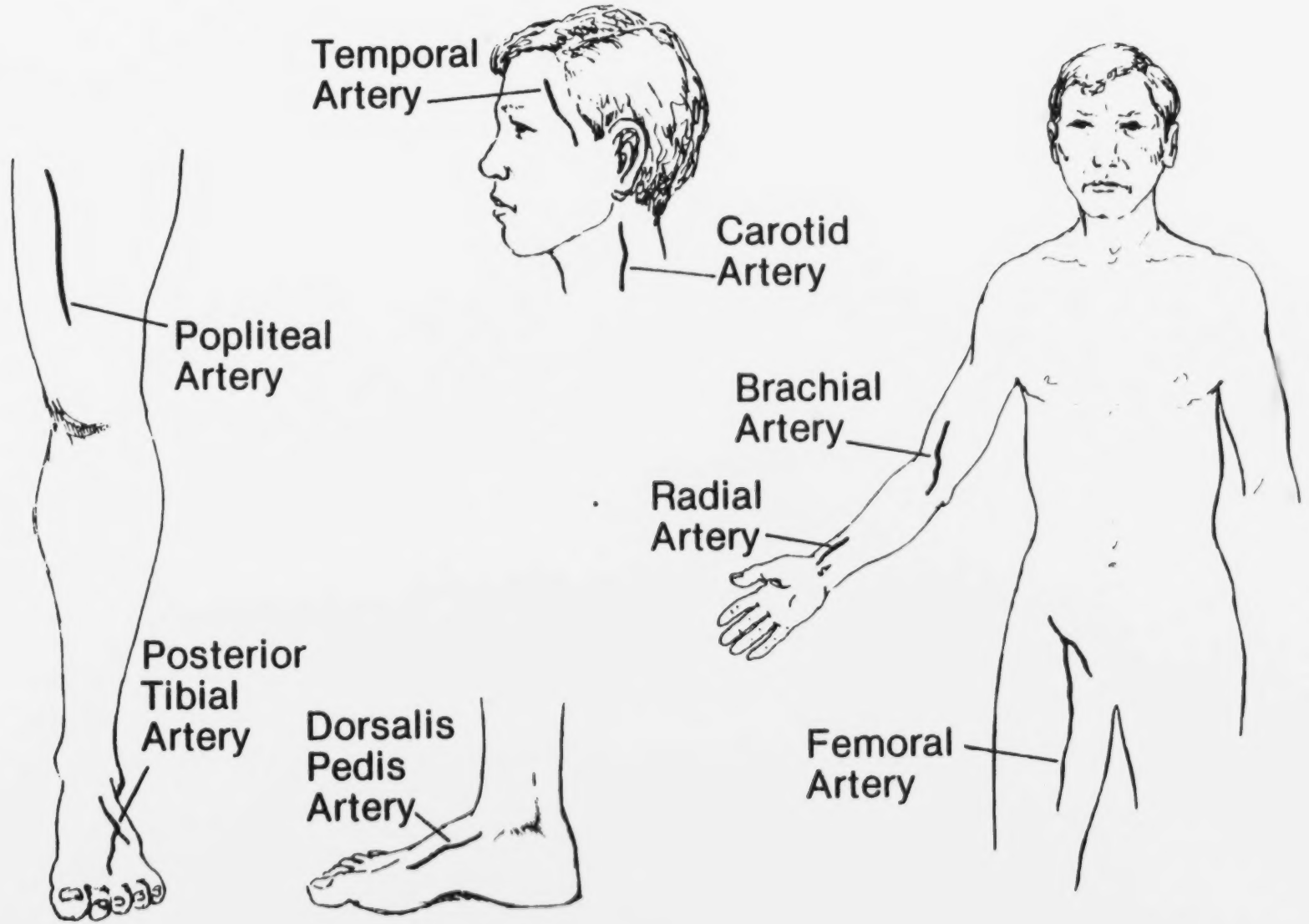
Handout: PULSE SITES

Flash cards

Text: DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers

WORKBOOK FOR DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers.

Sites For Taking A Pulse



LESSON PLAN: 3:10F

UNIT: III MEDICAL ASSISTANT

TOPIC: MEASURING AND RECORDING A RADIAL PULSE AND RESPIRATIONS

CLASS: MEDICAL SERVICES ASSISTANT

TYPE OF LESSON: SKILL

COMPETENCIES: After this class the student will be able to

1. Demonstrate the procedure of measuring and recording a radial pulse (+ or -) 2 beats per minute.
2. Demonstrate the procedure of measuring and recording respirations (+ or -) 2 breaths per minute.

INTRODUCTION

A Medical Services Assistant will measure a radial pulse and respirations simultaneously. After today's demonstration, students will pair up and practice these procedures on each other.

PRESENTATION (pg. 159 in DIVERSIFIED HEALTH OCCUPATIONS text).

I. MEASURING AND RECORDING A RADIAL PULSE

1. Assemble equipment (watch with a second hand, pen & paper).
2. Wash hands.
3. Identify patient and explain procedure.
4. Place patient in a comfortable position.
5. Place first two or three fingers on thumb side (radial artery) of wrist.

   NOTE: DO NOT USE THUMB, HAS OWN PULSE.
6. Count pulsations for one minute.

RADIAL PULSE SKILL LESSON PLAN cont.

7. Note volume (character & strength)
   - rhythm (regularity)
8. Record time & total beats
   - EXAMPLE (WRITE ON BOARD)
   5/22/-- 8 A.M. P 82
9. Check patient for comfort, safety.
10. Replace equipment.
11. Wash hands.
12. Report any unusual observations immediately.

II. MEASURING AND RECORDING RESPIRATIONS

1. After pulse has been counted, leave hand on pulse site.
   - Count number of times chest rises and falls.
2. Patient must be unaware of counting.
   - May alter breathing
3. Count each inspiration and expiration as one breath.
4. Note depth (character)
   - Rhythm (regularity)
5. Record information on paper.
   - EXAMPLE (WRITE ON BOARD)
   5/26-- 8 A.M. R 18
6. Check patient for comfort and safety.

RESPIRATIONS SKILL LESSON PLAN cont.

7. Replace all equipment.

8. Wash hands.

9. Report any unusual observations immediately.

EVALUATION AND FEEDBACK

The student will be given MEASURING A PULSE AND RESPIRATIONS SKILL SHEETS. The student will practice measuring a radial pulse and respirations on a peer until he/she is ready to be checked off by the peer reviewer. The teacher will perform the final evaluation.

MATERIALS NEEDED

Blackboard and chalk

Watch with second hand

Pen and paper

Evaluation Sheets: Measuring & Recording Radial Pulse & Respirations.

Text: DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers

EVALUATION SHEET

MEASURING AND RECORDING A RADIAL PULSE

NAME_____ DATE _____

The student will practice the procedure with a peer who will check off each step on the evaluation sheet. The teacher will evaluate the student's final; performance.

CODE S = SATISFACTORY R = RECHECK

		PEER REVIEWER	TEACHER
1.	Assembles equipment		
2.	Washes hands		
3.	Identifies patient & explains procedure		
4.	Positions patient correctly		
5.	Places hand correctly over pulse site		
6.	Counts one minute		
7.	Obtains correct count (+ or -) 2 beats per minute		
8.	Records accurately		
9.	Notes rhythm & volume		
10.	Checks patient before leaving		
11.	Replaces equipment		
12.	Washes hands		
13.	Reports unusual observations immediately		
	SIGNATURE		

EVALUATION SHEET

MEASURING AND RECORDING RESPIRATIONS

NAME_____ DATE_____

DIRECTIONS: The student will practice the procedure with a peer who will check off each step on the EVALUATION SHEET. The teacher will evaluate the student's final performance.

CODE S = SATISFACTORY R = RECHECK

	PEER REVIEWER	TEACHER
1.	Assembles equipment	
2.	Washes hands	
3.	Identifies patient	
4.	Positions patient correctly	
5.	Leaves hand on pulse site	
6.	Counts one minute	
7.	Keeps patient unaware of counting activity	
8.	Obtains correct count (+ or -) 2 breaths per minute	
9.	Records correctly	
10.	Notes rhythm and character	
11.	Checks patient before leaving	
12.	Replaces equipment	
13.	Washes hands	
14.	Reports unusual observations	
	SIGNATURE	

LESSON PLAN: 3:1ØH

UNIT: III MEDICAL ASSISTANT

TOPIC: MEASURING BLOOD PRESSURE

CLASS: MEDICAL SERVICES ASSISTANT

TYPE OF LESSON: THEORY

COMPETENCIES: After this class the student will be able to

1. List two factors that influence the amount of pressure in the arteries.
2. List the normal blood pressure range.
3. Describe the equipment used when measuring a blood pressure.
    a.) Aneroid & mercury sphygmomanometer
    b.) Stethoscope
4. Define, pronounce, and spell blood pressure, hypertension, hypotension, systolic pressure and diastolic pressure.

INTRODUCTION

Many times a health care providers observe a serious symptom of a disease or illness performing a routine test or skill. This can be said of measuring a patient´s blood pressure. Today´s class will cover information about what happens when a blood pressure is measured and the equipment used for this procedure.

CONTENT: (pgs. 163 - 164 in DIVERSIFIED HEALTH OCCUPATIONS text).

I. Definitions

a.) *Blood pressure - Definition (Flash card)

- The force of blood pushing against the walls of blood vessels.

B/P THEORY LESSON PLAN cont.

- When a B/P is taken, the force of blood through arteries is measured.

b). *Systolic pressure - (Flash card)

- When the heart contracts.

- The highest #, top B/P reading.

c.) *Diastolic pressure - (Flash card)

- When the heart is at rest (in between beats).

- The low, bottom B/P reading.

d.) *Hypertension - *(Flash card)

- A persistent ^ B/P

Systolic > 150

Diastolic > 94

e.) *Hypotension - B/P under 90/60

- (Normal for B/P for children, some adults.

II. Normal B/P range - 100/60 to 140/90

III. Two factors which influence B/P

a.) The rate of the heart beat.

b.) The ease of blood flow through blood vessels.

IV. EQUIPMENT USED TO MEASURE BLOOD PRESSURE

a.) Sphygmomanometer - B/P cuff (Hold up cuff)

sphygmo - means pulse
mano - means pressure
meter - means measure

B/P THEORY LESSON PLAN cont.

- Cuffs come in different sizes, adult, extra large & child.
- Has four parts - manometer, valve, cuff & bulb

b.) Two types of B/P cuffs

(1.) mercury -
- long column of mercury
- unit can be portable, or attatched to wall
- used most frequently in a health care facility

(2.) aneroid -
- gauge, pointer on a dial
- easy to carry, sm bag
- each mark on the gauge or column represents 2 millimeters (mm) of mercury (Hg)

c.) Stethoscope
- used to listen to brachial pulse during B/P procedure
- earpieces, turn inward before use
- bell, circular end, contains diaphragm (thin disk, sensitive to sound).

ASEPTIC CONSIDERATION: EAR PIECES, & DIAPHRAGM ARE WIPED OFF WITH ALCOHOL BEFORE AND AFTER EACH USE.

B/P THEORY LESSON PLAN cont.

EVALUATION & FEEDBACK

Question and answer period

Review with flash cards

Homework assignment (attached)

Quiz (attached)

MATERIALS NEEDED

Blackboard & chalk

Aneroid & mercury sphygmomanometers

Stethoscope

Flash cards

Text: DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers

LESSON PLAN: 3:101

UNIT: MEDICAL ASSISTANT

TOPIC: MEASURING & RECORDING BLOOD PRESSURE

CLASS: MEDICAL SERVICES ASSISTANT

TYPE OF LESSON: SKILL

COMPETENCIES: After this class the student will be able to:

1. Demonstrate the procedure for measuring a blood pressure (+ or -) 2mm Hg according to the procedure taught.

2. Identify one aseptic consideration and one safety consideration when measuring a B/P.

INTRODUCTION

Measuring blood pressures requires practice, skill and accuracy. As a Medical Assistant, you will be required to perform this procedure in most health care facilities. This lesson will demonstrate the procedure of measuring a blood pressure.

PROCEDURE: (pg. 164 - 165 in DIVERSIFIED HEALTH OCCUPATIONS text).

1. Ask for a student to be a patient for demonstration purposes.

2. Assemble equipment

   - blood pressure cuff, stethoscope, alcohol swabs, pen & paper.

3. Wash your hands.

4. Identify patient

B/P SKILL LESSON PLAN cont

5. Have patient sit, if standing, and explain procedure.

   - The doctor may order a B/P sitting, standing or lying down.

   SAFETY CONSIDERATION: SOME PATIENTS MAY HAVE HAD SURGERY OR BE ON DIALYSIS. THESE PATIENTS CANNOT HAVE A B/P TAKEN ON THE AFFECTED ARM.

6. ASEPTIC CONSIDERATION: Clean the stethoscope earpieces and diaphragm with alcohol.

7. Turn earpieces inward.

8. Roll the patient´s sleeve up 5 inches.

9. Squeeze air out of cuff and wrap snugly around upper arm.
   - Cuff should be even & smooth.

10. Position the manometer (gauge) for easy viewing.

11. Palpate the brachial artery with index and middle finger.

   - Not the thumb, has own pulse

12. Place stethoscope´s diaphragm over the brachial artery.

   - Not under cuff, may make extra noises

13. Turn valve clockwise to inflate cuff.

   - If closed too tight, difficult to release

14. Slowly open valve counter-clockwise to release air.

15. Wait until the sound of a pulse appears.

   - If pulse sounds immediately, stop procedure. Deflate cuff completely and wait 30 seconds.

   - Inflate cuff above 200.

B/P SKILL LESSON PLAN cont.

16. When first sound is heard, note reading on mamometer (gauge).

    - This is systolic pressure.
    - NOTE, each mark on the gauge represents 2mm Hg.

17. Continue to release air until there is a change of sound.

    - The sound is muffled or soft.
    - Change of sound is diastolic pressure
    - Note reading on manometer
    - Continue to release air and listen until cuff is deflated.
    - Write down both readings as a fraction
    - Systolic on top & diastolic on bottom
    - 120/80 (Write on the board)

18. Write the time and what arm B/P measured on.

19. Remove the cuff and deflate completely.

20. ASEPTIC CONSIDERATION: Clean stethoscope ear pieces and diaphragm with alcohol swabs.

21. Check patient for comfort and safety.

22. Wash hands.

23. Report any abnormal readings immediately.

EVALUATION & FEEDBACK

The student will be given a MEASURING A BLOOD PRESSURE EVALUATION SHEET. The student will practice measuring blood pressures on a peer until he/she is ready to be checked off by a peer reviewer. The teacher will perform the final evaluation.

B/P SKILL LESSON PLAN cont.

MATERIALS NEEDED

Blackboard and chalk

Aneroid sphygmomanometers

Teaching stethoscope

Stethoscopes

Alcohol swabs

Pen and paper

Text: DIVERSIFIED HEALTH OCCUPATIONS. 2nd edition, by Louise Simmers

EVALUATION SHEET

MEASURING AND RECORDING BLOOD PRESSURE

NAME_____ DATE_____

DIRECTIONS: The student will practice the procedure with a peer who will check off each step on the EVALUATION SHEET. The teacher will evaluate the student's final performance.

CODE: S = SATISFACTORY R = RECHECK

	Peer Reviewer	Teacher
1. Assembles equipment (B/P cuff, stethoscope, alcohol swabs, pen and paper)		
2. Washes hands		
3. Identifies the patient		
4. Explain what you are going to do.		
5. Cleans stethoscope earpieces and diaphragm with alcohol swabs.		
6. Roll sleeve 5 inches above elbow. Position arm, palm up.		
7. Wrap deflated cuff snugly and smoothly around upper arm.		
8. Positions gauge for viewing		
9. Palpates the brachial artery and place diaphragm of stethoscope over artery.		
1Ø. Closes valve clockwise		
11. Inflates cuff 17Ømm Hg		
12. Slowly opens valve counter clock clockwise		
SIGNATURE		

B/P EVALUATION SHEET

13.	Reads systolic pressure to (+ or -) 2mm Hg	
14.	Reads diastolic as cessation of sound (+ or -) 2 Hg	
15.	Records correctly	
16.	Checks patient for comfort	
17.	Cleans stethoscope earpieces & diaphragm with alcohol swab	
18.	Replaces equipment	
19.	Washes hands	
20.	Reports abnormal findings immediately	
	SIGNATURE	

MEDICAL SERVICES ASSISTANT HOMEWORK ANSWER SHEET

BLOOD PRESSURE DATE DUE: _____

NAME_____ DATE_____

DIRECTIONS: Read pages 163 to 165: Measuring And Recording Blood Pressures, in your text.

GRADING: Homework submitted one day late will drop one whole grade and one half grade each day there after.

1. Define blood pressure:

2. Define systolic:

3. Define diastolic:

4. The normal range for blood pressure is _____

5. List two factors which influence blood pressure.

   a.)

   b.)

6. Record the following blood pressure readings correctly.

Systolic 126	Diastolic 90
Diastolic 80	Systolic 192
Systolic 130	Diastolic 96
Diastolic 112	Systolic 210

7. Circle the above readings in question #6 which are abnormal and need to be reported immediately.

BLOOD PRESSURE HOMEWORK cont.

8. Identify the readings to which the arrows are pointing on the aneroid gauge. Write your answers in the spaces provided.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____
25. _____
26. _____

MEDICAL SERVICES ASSISTANT HOMEWORK ANSWER SHEET

BLOOD PRESSURE

DIRECTIONS: Read pages 163 to 165; Measuring And Recording Blood Pressures, in your text.

GRADING: Homework submitted one day late will drop one whole grade and one half grade each day thereafter.

1. Define blood pressure:

Blood pressure is the measurement of the pressure that blood exerts on the walls of arteries when the heart during the various stages of activity in the heart.

2. Define systolic:

Pressure which occurs when the heart is contracting.

3. Define diastolic:

Pressure which occurs when the heart is relaxed or between beats.

4. The normal range for blood pressure is 100/60 to 140/90.

5. List two factors which influence blood pressure.

a.) The rate of the heart beat.

b.) The ease of blood flow through blood vessels.

6. Record the following blood pressure readings correctly.

Systolic	126	Diastolic	90	126/90
Diastolic	80	Systolic	192	192/80
Systolic	130	Diastolic	96	130/96
Diastolic	112	Systolic	210	210/112

7. Circle the above readings in question #6 which are abnormal and need to be reported immediately.

BLOOD PRESSURE HOMEWORK cont.

8. Identify the readings to which the arrows are pointing on the aneroid gauge. Write your answers in the spaces provided.

1. 20
2. 34
3. 42
4. 52
5. 62
6. 76
7. 82
8. 90
9. 98
10. 104
11. 116
12. 130
13. 134
14. 142
15. 150
16. 158
17. 170
18. 178
19. 186
20. 198
21. 208
22. 222
23. 236
24. 244
25. 260
26. 276

MEDICAL SERVICES ASSISTANT Name: _____
Date: _____

QUIZ: BLOOD PRESSURE

I. Multiple Choice (5 points each)
Directions: Circle the BEST answer.

1. Blood pressure is usually measured by placing the stethoscope on the

a.) carotid artery.
b.) brachial artery.
c.) femoral artery.
d.) radial artery.

2. The top number of a blood pressure is called

a.) systolic pressure.
b.) mercury pressure.
c.) diastolic pressure.
d.) pulse pressure.

3. Each mark on an aneroid or mercury sygmomanometer represents

a.) 2mm Hg
b.) Ø.1mm Hg
c.) 2Ømm Hg
d.) 1mm Hg

4. The bottom number of a blood pressure is called

a.) pulse pressure.
b.) systolic pressure.
c.) mercury pressure.
d.) diastolic pressure.

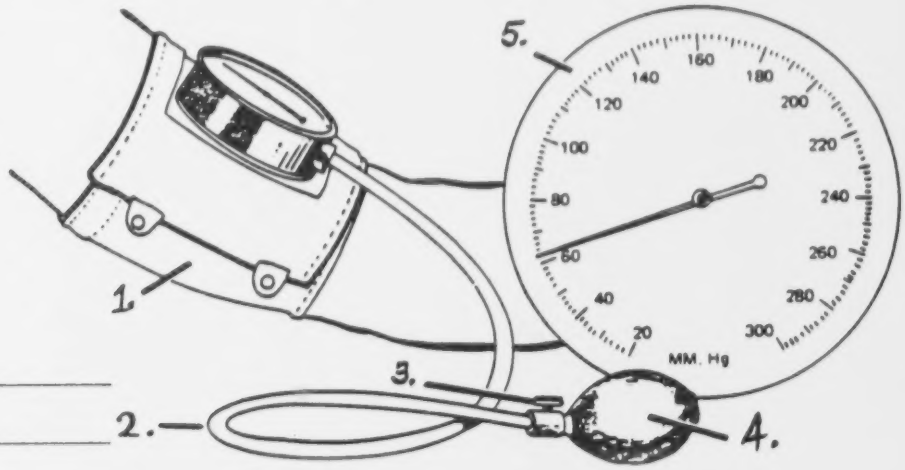
5. A blood pressure cuff should be applied

a.) 5 minutes before the blood pressure is measured.
b.) One inch below the elbow.
c.) 5 inches above the elbow.
d.) 3Ø mm Hg

Please Turn Page

BLOOD PRESSURE QUIZ cont.

II. Label the parts of an aneroid blood pressure cuff. Write your answers in the blanks provided. (5 points each)



1. _____

2. _____

3. _____

4. _____

5. _____

III. Short Answer.

DIRECTIONS: Answer the following questions in the space provided below. (10 points each)

1. Give the normal range of an adult's blood pressure.

2. List two factors which influence blood pressure.

   a.)

   b.)

3. What is the medical term for high blood pressure?

4. Why is blood pressure referred to as the "SILENT KILLER?"

MEDICAL SERVICES ASSISTANT ANSWER SHEET

QUIZ: BLOOD PRESSURE

I. Multiple Choice (5 points each)
Directions: Circle the BEST answer.

1. Blood pressure is usually measured by placing the stethoscope on the

a.) carotid artery.
(b.) brachial artery.
c.) femoral artery.
d.) radial artery.

2. The top number of a blood pressure is called

(a.) systolic pressure.
b.) mercury pressure.
c.) diastolic pressure.
d.) pulse pressure.

3. Each mark on an aneroid or mercury sygmomanometer represents

(a.) 2mm Hg
b.) Ø.1mm Hg
c.) 2Ømm Hg
d.) 1mm Hg

4. The bottom number of a blood pressure is called

a.) pulse pressure.
b.) systolic pressure.
c.) mercury pressure.
(d.) diastolic pressure.

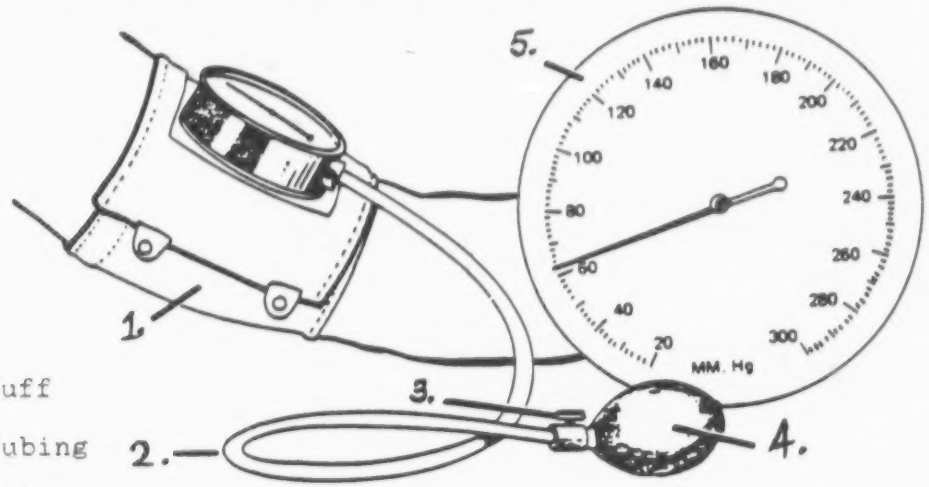
5. A blood pressure cuff should be applied

a.) 5 minutes before the blood pressure is measured.
b.) One inch below the elbow.
(c.) 5 inches above the elbow.
d.) 3Ø mm Hg

Please Turn Page

BLOOD PRESSURE QUIZ cont.

II. Label the parts of an aneroid blood pressure cuff. Write your answers in the blanks provided. (5 points each)



1. Cuff
2. Tubing
3. Valve
4. Bulb
5. Manometer (gauge)

III. Short Answer.

DIRECTIONS: Answer the following questions in the space provided below. (10 points each)

1. Give the normal range of an adult's blood pressure.

100/60 to 140/90

2. List two factors which influence blood pressure.

a.) The rate of the heart beat.

b.) The ease of blood flow through blood vessels.

3. What is the medical term for high blood pressure?

Hypertension

4. Why is blood pressure referred to as the "SILENT KILLER?"

Victims are unaware of disease. There are usually no signs or symptoms.

LESSON PLAN: 2:6A

UNIT: II ANATOMY & PHYSIOLOGY

TOPIC: SPECIAL SENSES: THE EYE

CLASS: MEDICAL SERVICES ASSISTANT

TYPE OF LESSON: THEORY

COMPETENCIES: After this class the student will be able to -

1. Correctly spell and label major anatomy of the eye.

   a.) Sclera, conjunctiva, cornea, iris, pupil, lens, retina, optic nerve, aqueous humor, & vitreous humor.

2. Describe three ways the eye is protected.

3. Trace the pathway of light through the eye.

4. Pronounce, define and correctly spell the following; cataract, glaucoma, conjunctivitis, occluded, refract, contagious, bld, myopia, hyperopia, opthalmologist, optician, optometrist, OU, OS & OD.

INTRODUCTION:

Many times vision tests are included in a physical examination. Besides detecting vision problems, these test can be instrumental with detecting eye diseases. Your knowledge of these tests along with the anatomy and physiology of the eye, will give a foundation for eye testing skills.

CONTENT: (pgs. 67 - 68 in DIVERSIFIED HEALTH OCCUPATIONS text)

1. ANATOMY OF THE EYE (HANDOUT #1; HOW WE SEE)

   - Eye ball measures 1" in diameter.
   - Only 1/6 of the eye exposed, protected by bony socket.
   - Also protected by eyelashes, tears, eyelids (wash, prevent, dirt, getting into eye.)

THE EYE, LESSON PLAN cont.

- Has 2 chambers

- Small anterior, filled with clear fluid AQUEOUS HUMOR. Aqueous fld replaces itself, drains out of the anterior chamber through sm canals. If canals become OCCLUDED, (clogged), the condition is called GLAUCOMA.

- Large posterior chamber, filled with jelly-like clear fld, VITREOUS HUMOR. Doesn't replace itself, lasts a lifetime.

a.) Sclera - Tough outer layer of eye. Referred to as "white of the eye."

b.) Conjunctiva - Mucous membrane, covers the eye. Function, protection collects foreign substances. If inflamed, CONJUNTIVITIS red eye, can be very CONTAGIOUS, (easily spread to the other eye or person.)

c.) Cornea - Transparent covering over anterior of eye. Has poor blood supply. Susceptible to infection from wounds, trauma.

d.) Iris - Colored area of the eye. Dilates and contracts, allows amt of light into the eye.

e.) Pupil - Opening, center of the iris

f.) Lens - Transparent, circular structure located behind the pupil.

Function: Bends (refracts) light.

Disease: Cataracts, opaque (cloudy)
Rx: surgery & glasses.

THE EYE, LESSON PLAN cont.

g.) Retina - Inner lining of the eye.
Function: Image formation.

h.) Optic nerve
- Located posterior eye, attached to sclera.
Function: Transport images to the brain.

II. TRACE PATHWAY OF LIGHT THROUGH THE EYE

- Light enters through the cornea, the aqueous humor, the pupil, the lens, and the vitreous humor to focus on the retina.

- As light rays pass through these parts, the rays are refracted in order to focus on the retina.

III. *DEFECTS OF THE EYE (Flash cards)

a.) myopia - Nearsightedness, problem seeing at distances.

b.) Hyperopia - Farsightedness, problem seeing things up close (reading).

IV. DEFINITIONS:

1. EYE SERVICES CAREERS (Handout #2)

a.) Opthalmologist - (OCULIST)
Physician, diagnosis & treats eye

b.) Optometrist - Licensed, nonmedical, measures glasses

c.) Optician - Fits glasses, grinds lenses

2. OD = Right eye

3. OS = Left eye

4. OU = Both eyes

THE EYE, LESSON PLAN cont.

EVALUATION AND FEEDBACK

Question & answer period

Review with flash cards

Homework assignment (attached)

Quiz (attached)

MATERIALS NEEDED

a.) Blackboard & chalk

b.) Handout #1: HOW WE SEE

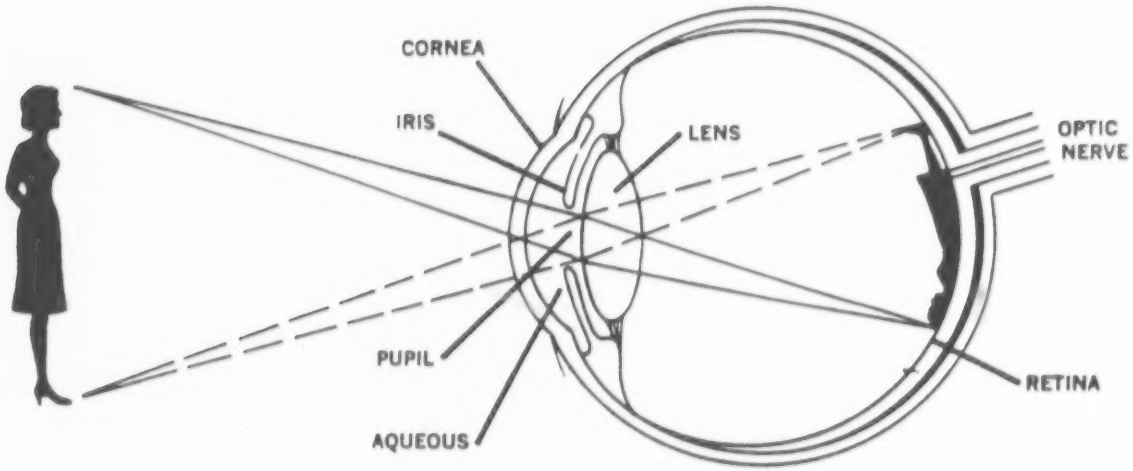
c.) Handout #2: DEFINITIONS; EYE SERVICES CAREERS

d.) Flash cards

e.) Anatomical chart, THE EYE

f.) Text: DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers

THE HUMAN EYE



HOW WE SEE

Vision is a function that requires more than the eye alone. In order for the eye to do its job completely, there must also be light to see by and the brain to define what is seen. As light strikes an object—a girl, for example—in a person's field of vision, the light rays are reflected from the girl to his eyes. The rays pass through the *cornea* or clear front window, the *aqueous* or watery liquid behind the cornea, the *pupil* or opening in the colored *iris*, and the *lens*. The lens of the eye bends the light rays as they pass through it, and focuses them on the *retina* or rear inner lining of the eye which contains optic nerve cells. The lens operates much as a camera lens focuses light rays on a film. The retina then relays the light ray image through the *optic nerve* to the brain. Though the image is received upside down because the lens has inverted it, the brain interprets it correctly and the viewer sees the girl right side up.

If a person's eyeball is too long and the image in focus falls in front of the retina, he will be nearsighted. If the eyeball is too short and the image falls behind it, he will be farsighted. If the cornea has an imperfect curvature, he will have astigmatism. Properly prescribed eyeglasses or contact lenses are the only means of correcting these visual faults.

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Ophthalmologist, Oculist, Optometrist, Optician . . . do you know the difference?

CONNECTICUT SOCIETY FOR THE
PREVENTION OF BLINDNESS, INC.
P. O. BOX 2020
MADISON, CONN. 06443

The following describes the qualifications of those providing eye health services:

An *Ophthalmologist* or *Oculist* is a physician—an M.D.—who specializes in diagnosis and treatment of defects and diseases of the eye, performing surgery when necessary or prescribing other types of treatment, including glasses.

An *Optometrist*, a licensed, nonmedical practitioner, measures refractive errors—that is, irregularities in the size or shape of the eyeball or surface of the cornea—and eye muscle disturbances. In his treatment the optometrist uses glasses, prisms, and exercises only.

An *Optician* grinds lenses, fits them into frames, and adjusts the frames to the wearer.

Definitions from U.S. Department of Health, Education and Welfare

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Founded 1908

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LESSON PLAN: 2:6B

UNIT: II ANATOMY & PHYSIOLOGY

TOPIC: SNELLEN EYE SCREENING

CLASS: MEDICAL SERVICES ASSISTANT

TYPE OF LESSON: THEORY/SKILL

COMPETENCIES: After this class the student will be able to

1. Identify two types of Snellen eye tests.
2. Describe the top and bottom numbers of Snellen eye test; 20/20.
3. Identify an aseptic consideration used when performing the Snellen Eye Screening procedure.
3. Demonstrate the procedure for Snellen Eye screening.

INTRODUCTION:

Vision screening tests are given as a part of a physical examination or to detect eye disease. This procedure will provide the basic information about this method of vision screening.

CONTENT: (pgs. 359 - 361 in DIVERSIFIED HEALTH OCCUPATIONS text).

1. VISION TESTS

a.) E chart - used for small children

b.) Characters (pictures) or letters

- bottom row, smallest
- top row, larger
- normal vision - 20/20
- top number 20, distance (ft) from chart
- bottom number 20, ht of characters (letters)

SNELLEN EYE SCREENING, LESSON PLAN cont.

c.) Snellen - Screens only for myopia (nearsightedness)

- Farsightedness (hyperopia) is tested by reading small print on cards or book.

d.) Ishihara test
- Color vision, colored dots on contrasting colors.

II. SNELLEN EYE SCREENING PROCEDURE

1. Assemble equipment

2. Have patient stand 2Ø ft away from chart. (Floor should be marked).

3. Wash hands

4. Explain procedure. Make sure patient knows the alphabet.

5. Patient's heels should be on the mark, 2Ø ft from the chart.

6. Give patient an eye shield or card to cover left eye, not hand. ASEPTIC CONSIDERATION: CARD OR SHIELD PREVENTS INFECTION. ALWAYS DISCARD CARD OR SHIELD AFTER EACH USE.

7. Instruct patient not to shut left eye.

8. Use a pointer. Start with larger letters move to smaller.

a.) Make sure pointer doesn't block letters.

b.) Select letters at random. (Patient may memorize.)

c.) Observe patient for squinting.

9. Patient should read 1ØØ% of line. Record results.

1Ø. Have patient cover right eye and repeat 8 & 9. Record results.

SNELLEN EYE SCREENING, LESSON PLAN cont.

11. Have patient view chart with both eyes. Record results.

12. Thank patient for cooperation.

13. Explain this is only a screening. Unfavorable results are referred to a specialist. CHECK AGENCY'S CRITERIA.

14. Clean & replace all equipment.

15. Wash hands.

EVALUATION & FEEDBACK

The student will be given a SNELLEN EYE SCREENING EVALUATION SHEET. The student will practice the Snellen Eye Screening procedure on a peer until until he/she is ready to be checked off by a peer reviewer. The teacher will perform the final evaluation.

Questions from this lesson will be included in Quiz: The Eye (attatched)

MATERIALS NEEDED

Blackboard & chalk

Snellen eye chart

Pointer

Tape

Card or eye shield

Pen & paper

Text: DEVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers

EVALUATION SHEET

SNELLEN EYE SCREENING

NAME _____ DATE _____

DIRECTIONS: The student will practice the procedure with a peer who will check off each step on the EVALUATION SHEET. The teacher will evaluate the student's final performance.

CODE S = SATISFACTORY R = RECHECK

	PEER REVIEWER	TEACHER
1. Assembles equipment		
2. Positions Snellen chart		
3. Places tape 20 Ft from chart		
4. Washes hands		
5. Identifies patient & explains procedure		
6. Tells patient to stand with heels on the line		
7. Tells patient to cover left eye		
a.) Doesn't block figures with pointer		
b.) Points to large figures first		
c.) Selects figures at random		
d.) Checks patient for squinting		
e.) Records correct reading		
8. Tells patient to cover right eye		
a.) Doesn't block figures with pointer		
b.) Points to large figures first		
c.) Selects figures at random		
SIGNATURE		

SNELLEN EYE EVALUATION cont.

d.) Checks patient for squinting	
e.) Records correct reading	
9. Tells patient to read with both eyes	
a.) Doesn't block figures with pointer	
b.) Points to large figures first	
c.) Selects figures at random	
d.) Checks patient for squinting	
e.) Records correct reading	
1Ø. Thanks patient's cooperation	
11. Cleans and replaces all equipment	
SIGNATURE	

MEDICAL SERVICES ASSISTANT Name: _____

QUIZ: The Eye

Matching (5 points each)

Directions: Match the meaning of Column B with the medical term in Column A.

NOTE: There is one extra answer in column B.

COLUMN A	COLUMN B
____ Myopia	1. Inner lining, nerve sensitive
____ Lens	2. Jelly-like fld, found in posterior chamber
____ Glaucoma	3. Outer white lining of the eye
____ Aqueous humor	4. Mucous membrane on eye surface
____ Ishihara Test	5. Inability to read fine print.
____ Cornea	6. Transparent anterior eye covering, heals slowly
____ Retina	7. Test given for nearsightedness
____ Catatract	8. Build up of pressure in the eye ball
____ Hyperopia	9. Opening, surrounded by the iris.
____ Sclera	10. Test for farsightedness
____ Conjunctiva	11. Muscle: surrounds pupil
____ Vitreous humor	12. Test for color blindness
____ Snellen Test	13. Transparent circular, disc shaped, refracts light rays
____ Pupil	14. Watery fluid: found anterior chamber of the eye
____ Iris	15. Clouding of the lens
	16. Inability to see far away

II. OBJECTIVE (3 points each)

DIRECTIONS: Circle the BEST answer.

1. If a person had an eye injury, he/she would see a

a.) Opthalmologist
b.) Obstetrician
c.) Optician
d.) Optometrist

2. The lens of the eye

a.) is on the anterior surface of the eye.
b.) is responsible for transmitting light images to the brain.
c.) refracts light.
d.) is necessary to prevent injury to the eye.

3. The medical abbreviation OU means

a.) Left eye
b.) Both eyes
c.) Nearsighted
d.) Right eye

4. An optician

a.) Diagnosis and treats conditions of the eye.
b.) Fits glasses to people.
c.) Delivers babies.
d.) Grinds lens for glasses.
e.) b & d

5. The medical abbreviation OD means

a.) Farsighted
b.) Both eyes
c.) Right eye
d.) Left eye

III. SHORT ANSWER (10 points)

1. What do the top number and bottom numbers represent with a Snellen vision test of 20/40?

MEDICAL SERVICES ASSISTANT Name: _____

QUIZ: The Eye ANSWER SHEET

Matching (5 points each)

Directions: Match the meaning of Column B with the medical term in Column A.

NOTE: There is one extra answer in column B.

COLUMN A		COLUMN B	
16.	Myopia	1.	Inner lining, nerve sensitive
13.	Lens	2.	Jelly-like fld, found in posterior chamber
8.	Glaucoma	3.	Outer white lining of the eye
14.	Aqueous humor	4.	Mucous membrane on eye surface
12.	Ishihara Test	5.	Inability to read fine print.
6.	Cornea	6.	Transparent anterior eye covering, heals slowly
1.	Retina	7.	Test given for nearsightedness
15.	Catatract	8.	Build up of pressure in the eye ball
5.	Hyperopia	9.	Opening, surrounded by the iris.
3.	Sclera	1Ø.	Test for farsightedness
4.	Conjunctiva	11.	Muscle: surrounds pupil
2.	Vitreous humor	12.	Test for color blindness
7.	Snellen Test	13.	Transparent circular, disc shaped, refracts light rays
9.	Pupil	14.	Watery fluid: found anterior chamber of the eye
11.	Iris	15.	Clouding of the lens
		16.	Inability to see far away

II. OBJECTIVE (3 points each)

DIRECTIONS: Circle the BEST answer.

1. If a person had an eye injury, he/she would see a

(a.) Opthalmologist
b.) Obstetrician
c.) Optician
d.) Optometrist

2. The lens of the eye

a.) is on the anterior surface of the eye.
b.) is responsible for transmitting light images to the brain.
(c.) refracts light.
d.) is necessary to prevent injury to the eye.

3. The medical abbreviation OU means

a.) Left eye
(b.) Both eyes
c.) Nearsighted
d.) Right eye

4. An optician

a.) Diagnosis and treats conditions of the eye.
b.) Fits glasses to people.
c.) Delivers babies.
d.) Grinds lens for glasses.
(e.) b & d

5. The medical abbreviation OD means

a.) Farsighted
b.) Both eyes
(c.) Right eye
d.) Left eye

III. SHORT ANSWER (10 points)

1. What do the top number and bottom numbers represent with a Snellen vision test of 20/40?

The top number (20) represents the distance (ft) the patient is from the chart. The bottom number (40) represents the height of the letters (mm) on the chart that the patient can read at that distance.

MEDICAL SERVICES ASSISTANT NAME: _____

HOMEWORK: THE EYE DATE DUE: _____

DATE: _____

GRADING: Homework submitted one day late will drop one whole grade and one half grade each day late thereafter.

DIRECTIONS: Read pages 67, 68; Anatomy Of The Eye, & 359 to 362; Vision Screening in your text. Write your answers in the following spaces provided.

1. When light rays enter the eye, they pass through the _____, _____ and _____.

2. What happens to light as it passes through the eye?

3. List four ways the eye is protected.

   a.) d.)

   b.)

   c.)

4. Define the following medical terms completely.

   a.) cataract -

   b.) conjuntivitis -

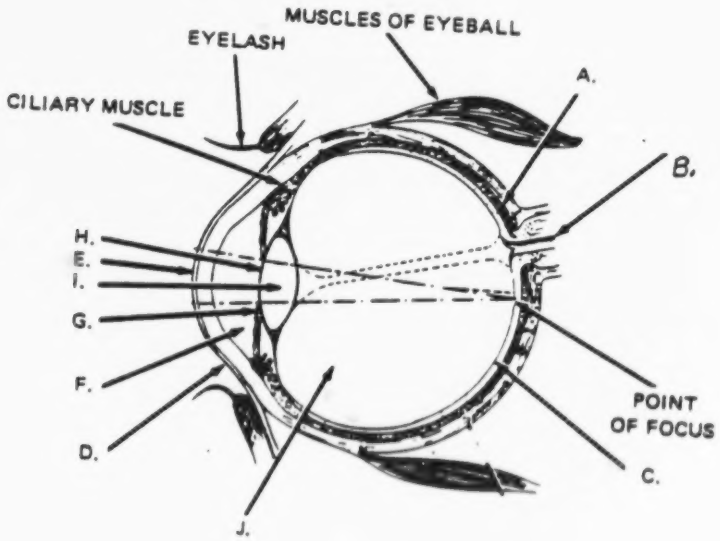
   c.) hyperopia -

   d.) glaucoma -

   e.) myopia

The Eye, cont.

6. Label the following diagram of the eye and briefly state the function of each.



A. _____

B. _____

C. _____

D. _____

E. _____

F. _____

G. _____

H. _____

I. _____

J. _____

MEDICAL SERVICES ASSISTANT

HOMEWORK: THE EYE ANSWER SHEET

GRADING: Homework submitted one day late will drop one whole grade and one half grade each day late thereafter.

DIRECTIONS: Read pages 67, 68; Anatomy Of The Eye, & 359 to 362; Vision Screening in your text. Write your answers in the following spaces provided.

1. When light rays enter the eye, they pass through the cornea, aqueous humor, pupil, lens and vitreous humor.

2. What happens to light as it passes through the eye?

   It is refracted.

3. List ways the eye is protected.

   a.) Tears

   b.) Eyelashes

   c.) Eyelids

   d.) Eye socket

   e.) Blinking

4. Define the following medical terms completely.

   a.) cataract - Opaque, clouding of the lens. Treatment: surgery & glasses.

   b.) conjuntivitis - "Pink eye" Inflammation of the mucous membrane covering the eye. Is contageous, if bacterial or viral. Easily spreads from one eye to the other. Treatment by a physician; antibiotic ointment or drops.

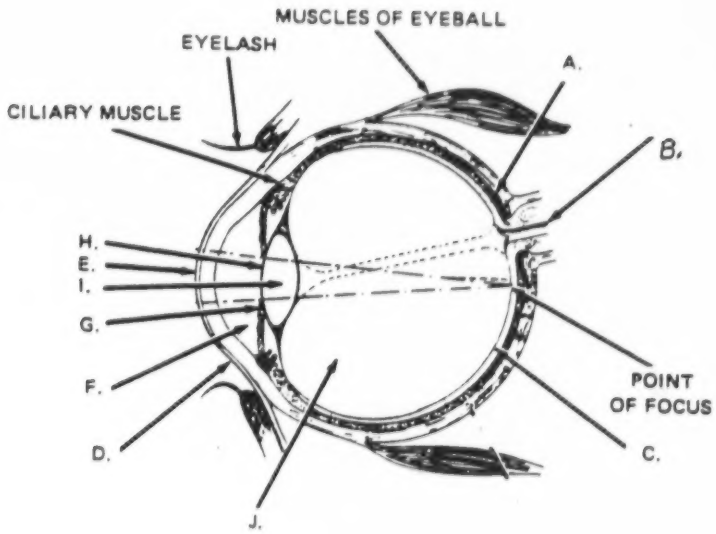
   c.) hyperopia - Farsightedness, problem seeing or reading up close. Treatment; reading glasses.

   d.) glaucoma - Eye disease characterized by a build up of pressure inside the eye. If not treated, the victim will become blind. There may be no signs or symptoms.

   e.) myopia
   Nearsightedness; touble seeing at distances.

The Eye, cont.

6. Label the following diagram of the eye and briefly state the function of each.



A. Sclera: outermost tough tissue layer of eye

B. Optic Nerve: transmits nerve impulses to the brain

C. Retina: innermost nerve sensitive layer of eye

D. Conjunctiva: mucous membrane covers & protects

E. Cornea: allows light rays to enter the eye

F. Aqueous humor: watery fld, found in anterior chamber

G. Iris: muscle which controls the size of the pupil

H. Pupil: hole surrounded by iris, allow light to enter

I. Lens: refracts light, disc shape

J. Vitreous humor: clear jelly-like, found in posterior chamber of eye

LESSON PLAN: 3:11

UNIT: III MEDICAL ASSISTANT

TOPIC: MEASURING THE HEIGHT AND WEIGHT OF AN ADULT

CLASS: MEDICAL SERVICES ASSISTANT

TYPE OF LESSON: THEORY/SKILL

COMPETENCIES: After this class the student will be able to

1. List (4) important points to follow before a daily weight is measured.
2. Describe the procedures for measurement of an adult's:
   a.) Height, within (+ or -) 1/4 in.
   b.) Weight, within (+ or -) 1/4 lb.
3. Demonstrate the conversion of pounds into kilograms.
4. Demonstrate the conversion of inches into feet & inches.
5. Define the following; obesity, wt, ht, lb, oz, ft, in and kilogram.

INTRODUCTION:

Height and weight measurements are important indicators for a physician whether a disease is present in the patient. The Medical Services Assistant will be required to accurately perform these measurements in various health care settings. Today's class will provide the necessary facts and skills to perform this procedure safely and accurately.

CONTENT: (pgs. 350 - 353 in DIVERSIFIED HEALTH OCCUPATIONS text).

A. PREPARATION TO WEIGH A PATIENT

1. 10% wt gain or loss is normal.

   20 lbs > normal wt is obesity*
   *(HOLD UP FLASH CARD)

MEASURING HT & WT OF AN ADULT cont.

2. If weighed daily, remember:

   a.) Use same scale daily.

   b.) Make sure scale is balanced before weighing patient.

   c.) Wt patient same time daily.

   d.) Make sure patient wears same amount clothing.

3. Provide privacy and confidentiality.

   - Be positive & nonjudgmental.

4. Wt is recorded in lbs & oz or kilograms.

   - (Metric scale: use Ø.1 kilogram increments.)

   * Hold up flash cards

   a.) wt* = weight

   b.) oz* = ounce

   c.) 2.2 lb* = 1 kilogram (kg)

   d.) DEMONSTRATE CONVERSION OF LBS TO KG ON BOARD

   - ex. 132 lbs divided by 2.2 = 6Ø kg

   - ex. 8Ø lbs divided by 2.2 = 36.4*

   - *(ROUND OFF TO NEAREST Ø.1)

5. Ht is recorded as ft & in or centimeters

   - Measuring bar on physician's scale

   - Each mark represents quarter inch increments.

   a.) ft* = feet

MEASURING HT & WT OF AN ADULT cont.

b.) in* = inch

c.) DEMONSTRATE ON BOARD

ex.
To convert to feet & in

12 divided into 72 = 6 ft

ex. 12 divided into 44 = 3 ft 8in

B. INTRODUCTION TO THE PHYSICIAN'S SCALE

1. Two weight bars.

- Bottom: increments of 50 lbs.
- Top: increments of 1/4 lbs.
- Must be balanced before weighing.
- Make sure wts are in grooved slots.

2. Platform

SAFETY CONSIDERATION: PLATFORM IS SHAKY. ASSIST PATIENT.

- Have patient remove shoes or slippers.

ASEPTIC CONSIDERATION: PLACE PAPER TOWEL ON PLATFORM.

3. Measuring height guide bar.

- Bar flips up.
- Lightly bring down height bar to touch the top of the skull
- Patient safety is a must. watch closely to prevent falls.

MEASURING WT OF ADULT LESSON PLAN cont.

C. Procedure; measuring & recording ht of adult

1. Assemble equipment.
2. Wash hands.
3. Prepare scale by making sure balance wts are at zero & balance arm is freely swinging before patient gets on scale.
4. ASEPTIC CONSIDERATION: PLACE PAPER TOWEL ON PLATFORM.
5. Have patient remove robe, slippers or shoes.
6. SAFETY CONSIDERATION: ASSIST PATIENT OFF & ON SCALES.

   When steady, let go. BE SURE TO OBSERVE AT ALL TIMES.
7. Move lower bar to approxamate wt (100 lbs, 150 lbs, etc.)

   - MAKE SURE WT IS IN THE SLOTTED GROVE
8. Slide lower wt to the point where balance arm is freely moving.
9. Read weight within 1/4 (+ or -) lb. Ensure privacy, be nonjudgmental.
10. Assist of the scale.
11. Record measurement according to agency policy.

    - Convert to ft & in is most common.

D. Measuring & recording the ht of an adult

1. After assisting the patient off the scale, raise the measurement bar.
2. Lift higher than the ht of patient.

MEASURING THE HT & WT OF AN ADULT cont.

3. Assist the patient back onto the scale.

4. Carefully lower the measurement bar to top of skull.

5. Read ht within 1/4 (+ or -) in.

6. Lift measurement bar

7. Assist patient off the scale

8. Records measurement according to agency policy.

   - Conversion to ft & in is most common.

9. Washes hands.

EVALUATION AND FEEDBACK

Question & answer period

Homework assignment (attached)

Weekly quiz (conversion problems with ht & wt, multiple choice, true/false & essay)

The student will be given, MEASURING THE HEIGHT AND WEIGHT OF AN ADULT SKILL SHEET. The student will practice weighing and measuring the height of a peer until he/she is ready to be checked off by a peer reviewer. The teacher will perform the final evaluation.

MATERIALS NEEDED:

Blackboard and chalk

Physician's scale

Paper towel

Paper and pen

Evaluation Sheet: Measuring The Height & Weight Of An Adult

Text: DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers

MEDICAL SERVICES ASSISTANT HOMEWORK

MEASURING WEIGHT & HEIGHT: ADULT

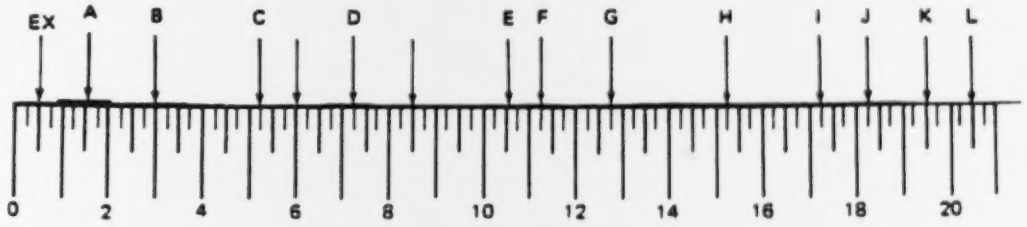
DATE DUE _____

NAME _____ DATE _____

GRADING: Homework submitted one day late will drop one whole grade and one half grade each day late thereafter.

DIRECTIONS: Read pages 350 to 353, MEASURING HEIGHT AND WEIGHT, in your text.

The diagram below is of a physician's balanced-beam scale.
NOTE: This is the top scale. The scale is read 1/4, 1/2, 3/4, 1, etc. Each long line represents 1 pound.
EXAMPLE: The first arrow is pointing to 1/2 pound (1/2 lb).
Write in your answers in the spaces provided below.



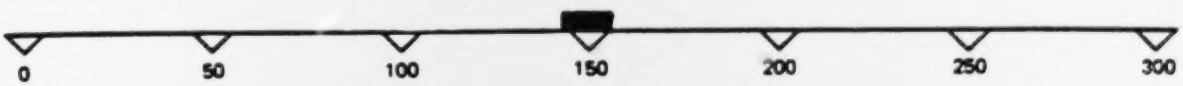
A. _____ E. _____ I. _____

B. _____ F. _____ J. _____

C. _____ G. _____ K. _____

D. _____ H. _____ L. _____

NOTE: The second diagram below represents the lower bar on a physician's balanced-beam scale.



1. The example shows a weight of _____?

2. Take the first four answers (A, B, C, & D) you found from reading the top bar in your first exercise. Add these answers to the bottom bar reading for a total weight reading.

A _____ C _____

B _____ D _____

MEASURING HEIGHT & WEIGHT, cont.

3. When measuring an adult, record the results in feet and inches.

EXAMPLE: Total height is 54 inches. Divide total inches by 12 (12 inches = 1 foot)

$$12\overline{)54}\ \begin{matrix}4\\ \\ 48\\ \hline 6\end{matrix} \quad = 4 \text{ ft } 6 \text{ in}$$

Convert the following inches to feet and inches. Write your answers in the blanks provided. Show your work (computations).

A. 78 inches = _____

B. 55 3/4 inches = _____

C. 70 1/2 inches = _____

D. 31 inches = _____

E. 63 1/4 inches = _____

F. 59 inches = _____

G. 62 1/4 inches = _____

EVALUATION SHEET

MEASURING HT & WT OF AN ADULT

NAME_____ DATE _____

DIRECTIONS: The student will practice the procedure with a peer who will check off each step on the EVALUATION SHEET. The teacher will evaluate the student's final performance.

CODE S = SATISFACTORY R = RECHECK

		PEER REVIEWER	TEACHER
1.	Assembles equipment		
2.	Washes hands		
3.	Balances scale at zero		
4.	Places paper towel on platform		
5.	Identifies patient & explains procedure		
6.	Has patient remove footwear		
7.	Safely assist onto scale		
8.	Balances scale correctly		
9.	Reads weight (+ or -) 1/4 lb		
10.	Assists off scale		
11.	Raises Measurement bar		
12.	Assist on to scale with back toward scale		
13.	Carefully lowers bar to top of skull		
14.	Reads Ht (+ or -) 1/4 in		
15.	Assists patient off scale		
16.	Converts height measurements to Ft & in		
17.	Records Ht correctly		
18.	Washes hands SIGNATURE		

LESSON PLAN: 3:11A

UNIT: III MEDICAL ASSISTANT

TOPIC: MEASURING HEIGHT AND WEIGHT OF AN INFANT

CLASS: MEDICAL SERVICES ASSISTANT

TYPE OF LESSON: SKILL

COMPETENCIES: After this class the student will be able to

1. Identify an aseptic and safety consideration when weighing an infant.
2. Demonstrate the procedure for measuring the weight (+ or -) 1/4 lb.
3. Demonstrate the procedure of weighing an infant (+ or -) 1/4 lb.

INTRODUCTION

Working with infants can be very enjoyable. As a health care provider, there are important steps to take when performing procedures for infants. Today's lesson will demonstrate the safe and aseptic skills necessary when weighing and measuring an infant.

PROCEDURE (pgs. 353 - 355 in DIVERSIFIED HEALTH OCCUPATIONS text).

1. Assemble all equipment.
2. Wash hands.
3. Balance scale to zero. ASEPTIC CONSIDERATION: PLACE TISSUE PAPER ON SCALE TO PROTECT FROM PATHOGENS.
4. If in hospital, identify infant with armband. Explain procedure to parent if in doctor's office. Ask parent infant's name.
5. Pick up infant SUPPORT HEAD AND NECK, OTHER HAND UNDER BUTTOCKS.. Place on flat surface and remove diaper. Undershirt may be left on. The room must be warm to prevent chilling.
6. Place infant on scale. SAFETY CONSIDERATION: WATCH CLOSELY AT ALL TIMES. KEEP ONE HAND OVER INFANT AT ALL TIMES. *See picture in text, page 354.

MEASURING INFANT'S HT & WT cont.

7. Move scale weights until beam is balanced.

8. Record weight. Recheck reading.

9. Pick up infant and place on flat surface.

SAFETY CONSIDERATION: DO NOT LEAVE INFANT UNATTENDED. IF IT IS NECESSARY TO REACH SOMETHING, HOLD CHILD WITH ONE HAND AND REACH WITH ANOTHER.

II. MEASURING AN INFANT

1. Lay infant flat.

2. Place zero mark of tape measure at the infant's head.

3. If exam table has measuring bar, position infant's head at the zero mark.

4. Ask parent or assistant to hold head while gently straightening out the infant's feet.

5. Measure to the infant's heel.
*See picture in text, page 354

6. Record measurements. Recheck reading.

7. Return infant to crib or parent.

8. Clean and replace all equipment used. Throw tissue in a waste can. Some facilities wash off scale with an antiseptic.

9. Wash hands.

FEEDBACK AND EVALUATION

The student will be given a MEASURING HEIGHT AND WEIGHT OF AN INFANT EVALUATION SHEET. The student will practice the procedure until he/she is ready to be checked off by a peer reviewer. The teacher will perform the final evaluation.

Questions from this lesson will be included in weekly quiz.

MEASURING INFANT'S HT & WT cont.

MATERIALS NEEDED

Anatomical infant

Infant scale

Tissue paper

Tape measure

Paper & pen

Evaluation Sheet: Measuring The Ht & Wt Of An Infant

Text: DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers

EVALUATION SHEET

MEASURING HEIGHT AND WEIGHT OF AN INFANT

NAME_____ DATE_____

DIRECTIONS: The student will practice the procedure with a peer who will check off each step on the EVALUATION SHEET. The teacher will evaluate the student's final performance.

CODE S = SATISFACTORY R = RECHECK

	PEER REVIEWER	TEACHER
1. Assembles equipment		
2. Washes hands		
3. Balances scale to zero		
4. Covers with tissue paper		
5. Identifies infant		
6. Picks up infant correctly		
7. Removes infant's clothing & diaper		
8. Places infant on scale		
9. Keeps hand over infant at all times		
10. Balances weight beam		
11. Reads scale (+ or -) 1/4 lb		
12. Records weight correctly		
13. Places infant on flat surface		
14. Measures height zero mark at head		
15. Places other end of tape at heel		
16. Keeps tape position straight		
17. Watches infant closely		
SIGNATURE		

EVALUATION SHEET: MEAS. HT & WT OF INFANT

18.	Reads height (+ or -) 1/4 in	
19.	Records height correctly	
20.	Returns infant to crib or parent	
21.	Replaces all equipment	
22.	Sets scale weights at zero	
23.	Washes hands	

SIGNATURE

LESSON PLAN: 3:13

UNIT: III MEDICAL ASSISTANT

TOPIC: TESTING OF BLOOD FOR GLUCOSE

CLASS: MEDICAL SERVICES ASSISTANT

TYPE OF LESSON: THEORY/SKILL

COMPETENCIES: After this class the student will be able to

1. Describe the procedure of obtaining a blood sample with an automatic lancet.
2. Describe the procedure of testing glucose blood level with a battery operated glucose meter.
3. List 4 universal precaution techniques used when blood is handled.
4. Define, pronounce, and spell glucose, diabetes, insulin, hypoglycemia, hyperglycemia, glycosuria, polyuria, FBS and AIDS.

INTRODUCTION:

The testing of blood can accurately detect many chemical imbalances and diseases in the body. The test demonstrated today will determine the amount of glucose (the body's sugar) present in a patient's blood. Because of the potential of a blood disease, this procedure will be demonstrated without an actual finger stick. A glucose sample to simulate a blood sample will be substituted.

CONTENT: (pgs. 335 - 337 in DIVERSIFIED HEALTH OCCUPATIONS text).

I. *Diabetes *(Flash card)

- Disease of the pancreas
- *Insulin; hormone which controls the level of glucose in blood.
- Lack of insulin *(hyperglycemia)
- Too much *glucose, poor healing qualities, thirst, polyuria (> urination) & weakness > coma

TESTING OF BLOOD FOR GLUCOSE cont.

- Normal glucose range
  80 - 120 mg/dl of blood
- Too much insulin,(*hypoglycemia)
- Signs & symptoms: dizzy, confused, agitated, & sweaty
- Glucose tolerance test (GTT)
  Tests metabolism of glucose
- *FBS, Fasting Blood Sugar; blood test determines glucose bld levels.

  (Nothing by mouth (NPO) after midnight).

A.) Battery operated glucose testing units

- Lightweight, easy to use
- More accurate than urine testing
- Better control of insulin dosage
- Kidney filters out excess sugar in urine (Glycosuria)* FLASH CARD
- Other methods of testing: Urine test; Clinitest or reagent strip

B.) *Universal precautions *(Flash card)

- *AIDS, Acquired Immune Deficiency (The body lacks the ability to fight infections).
- BECAUSE OF THE CONCERN FOR AIDS, HEALTH OCCUPATION STUDENTS SHOULD NOT PERFORM ANY PROCEDURE WITH TESTING OF BLOOD.
- Good aseptic hand washing
- Disposable latex gloves are worn during procedure.

TESTING BLOOD FOR GLUCOSE cont.

- Procedures where lg amts bld: mask, gown & safety glasses are worn
- ALL BLD MUST BE REGARDED AS HAZARDOUS
- DISEASES, AIDS & HEPITITIS, CAN BE TRANSMITTED BY HANDLING BLD

II. PROCEDURE: OBTAINING BLOOD SAMPLE FOR GLUCOSE TESTING

1. Gather equipment (battery operated glucose meter, automatic lancet device, sterile lancet, sterile gauze, glucose reagent strips, alcohol swabs, pen & paper.

   NOTE: Read instructions carefully on lancet device and battery glucose meter before beginning.

2. Wash hands
3. Identify patient & explain procedure.
4. Put on disposable gloves
5. Select finger
4. Do not puncture index finger or thumb
   - thumb artery is close to surface
   - fingers are used frequently for work
5. Avoid swollen, rash, inflamed or cyanotic fingers.
6. Clean finger well with alcohol swab, let air dry.
7. Load and cock automatic lancet.
8. Grasp finger firmly with thumb & forefinger.
9. Lay lancet device on lateral finger tip pad.
1Ø. Trigger lancet, puncture is 2 - 4 mm deep.

TESTING BLOOD FOR GLUCOSE cont.

11. If no bld, gently squeeze at a distance from wound.

    - vigorous pressure causes extracellular fld to escape may result inaccurate test

12. Touch drop of blood on reagent strip pads.

    - careful not to handle reagent strip pads, can alter reading.

13. Press TIME button on glucose meter

14. When beeper alarms, wipe reagent strip with clean cotton ball until dry.

15. Insert reagent strip into glucose meter for final results.

16. Give the patient sterile gauze pad to stop bleeding

17. Remove gloves

17. Clean up area. Solid lancet, cotton balls, gauze & gloves are disposed in proper receptacle for bld contaminated products.

18. Wash hands

EVALUATION AND FEEDBACK

Question and answer period

Review with flash cards

Homework assignment (attached)

Quiz (attached)

MATERIALS NEEDED

Blackboard & chalk

Injectable training arm with hand

Battery operated glucose meter

Automatic lancet device

TESTING BLOOD FOR GLUCOSE cont.

Sterile lancet

Sterile gauze

Glucose reagent strips

Alcohol swabs

Pen & paper

Text: DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition by Louise Simmers

MEDICAL SERVICES ASSISTANT DATE_____

HOMEWORK: GLUCOSE TESTING OF BLOOD DATE DUE_____

NAME_____

GRADING: Homework submitted one day late will drop one whole grade and one half grade each day thereafter.

DIRECTIONS: Read pages 316 to 319; Puncturing The Skin To Obtain Blood, and pages 335 to 338: Measuring Blood Glucose Level. Write your answers in the spaces provided below.

1. Why is the method of testing blood for glucose better than urine?

2. Strips of plastic reagent pad(s) called _____ can be used to test glucose levels.

3. Define the following:

   a.) FBS -

   b.) Glycosuria -

   c.) Hyperglycemia -

   d.) Hypoglycemia -

   e.) AIDS -

4. Describe four Universal Precaution techniques used when a health care worker comes into contact with blood or body fluids.

   a.)

   b.)

   c.)

   d.)

MEDICAL SERVICES ASSISTANT ANSWER SHEET

HOMEWORK: GLUCOSE TESTING OF BLOOD

GRADING: Homework submitted one day late will drop one whole grade and one half grade each day thereafter.

DIRECTIONS: Read pages 316 to 319; Puncturing The Skin To Obtain Blood, and pages 335 to 338: Measuring Blood Glucose Level. Write your answers in the spaces provided below.

1. Why is the method of testing blood for glucose better than urine? TESTING OF THE BLOOD IS MORE ACCURATE.

2. Strips of plastic reagent pad(s) called REAGENT STRIPS can be used to test glucose levels.

3. Define the following:

   a.) FBS - FASTING BLOOD SUGAR - A BLOOD TEST WHICH MEASURES BLOOD SERUM GLUCOSE LEVELS AFTER THE PATIENT HAS HAD NOTHING BY MOUTH FOR A PERIOD OF TIME.

   b.) Glycosuria - PRESENCE OF SUGAR IN THE URINE.

   c.) Hyperglycemia - PRESENCE OF SUGAR IN THE BLOOD.

   d.) Hypoglycemia - LOW BLOOD SUGAR.

   e.) AIDS - ACQUIRED IMMUNE DEFICIENCY - A FATAL DISEASE CHARACTERIZED BY THE BODY'S INABILITY TO FIGHT INFLECTION.

4. Describe four Universal Precaution techniques used when a health care worker comes into contact with blood or body fluids.

   a.) GOOD HAND WASHING TECHNIQUE

   b.) GLOVES

   c.) MASK & SAFETY GLASSES (USED FOR LARGE AMTS OF BLOOD)

   d.) GOWN (USED FOR LARGE AMTS OF BLOOD)

MEDICAL SERVICES ASSISTANT NAME: _____

QUIZ: GLUCOSE TESTING OF BLOOD DATE_____

I. MULTIPLE CHOICE (10 points each)

DIRECTIONS: CIRCLE the BEST answer.

1. A diabetic is lacking

   a.) Sugar

   b.) Adrenalin

   c.) Insulin

   d.) Salt

2. A Fasting Blood Sugar is taken after the patient

   a.) Has eaten breakfast

   b.) Has been NPO since midnight

   c.) Had a late afternoon snack

   d.) Has not eaten for two hours

3. Glycosuria is

   a.) Too much insulin

   b.) Blood in the urine

   c.) Excess salt in the blood

   d.) Excess sugar in the urine

4. Universal precautions include all of the following EXCEPT

   a.) Throwing bloody gauze pad in paper trash can

   b.) Washing hands before and after a procedure

   c.) Wearing latex gloves

   d.) Wearing mask and protective glasses

QUIZ, GLUCOSE TESTING OF BLOOD cont.

5. Hyperglycemia is

   a.) Excess of sugar in the blood

   b.) Excess of insulin in the blood

   c.) Frequent urination

   d.) Lack of insulin in the blood

II. SHORT ANSWER (10 points each)

1. What area on a finger should be punctured for a blood sample?

2. Which fingers should not be selected for puncture?

   WHY?

3. Name an advantage a patient has by having a glucose blood test instead of a urine test?

III. FILL IN THE BLANK (10 points each)

1. A person who has too much insulin will have symptoms of _____, _____ &_____ .

2. A person who has too much glucose would have _____ &_____ . for symptoms.

MEDICAL SERVICES ASSISTANT NAME: _____

QUIZ: GLUCOSE TESTING ANSWER SHEET

I. MULTIPLE CHOICE (10 points each)

DIRECTIONS: CIRCLE the BEST answer.

1. A diabetic is lacking

   a.) Sugar

   b.) Adrenalin

   (c.) Insulin

   d.) Salt

2. A Fasting Blood Sugar is taken after the patient

   a.) Has eaten breakfast

   (b.) Has been NPO since midnight

   c.) Had a late afternoon snack

   d.) Has not eaten for two hours

3. Glycosuria is

   a.) Too much insulin

   b.) Blood in the urine

   c.) Excess salt in the blood

   (d.) Excess sugar in the urine

4. Universal precautions include all of the following EXCEPT

   (a.) Throwing bloody gauze pad in paper trash can

   b.) Washing hands before and after a procedure

   c.) Wearing latex gloves

   d.) Wearing mask and protective glasses

QUIZ, GLUCOSE TESTING

5. Hyperglycemia is

(a.) Excess of sugar in the blood

b.) Excess of insulin in the blood

c.) Frequent urination

d.) Lack of insulin in the blood

II. SHORT ANSWER (10 points each)

1. What area on a finger should be punctured for a blood sample?

LATERAL PADS OF FINGER TIPS.

2. Which fingers should not be selected for puncture?

THUMB & INDEX FINGER

WHY? THESE DIGITS ARE USED MORE FREQUENTLY.

ARTERY IN THE THUMB IS CLOSE TO THE SURFACE.

3. Name an advantage a patient has by having a glucose blood test instead of a urine test?

TESTING OF BLOOD FOR GLUCOSE IS MORE ACCURATE THAN URINE TESTING.

BETTER INSULIN DOSAGE REGULATION

III. FILL IN THE BLANK (10 points each)

1. A person who has too much insulin will have symptoms of DIZZINESS, CONFUSED, AGITATION & > PERSPIRATION.

2. A person who has too much glucose would have THIRST, FREQUENT URINATION, POOR HEALING QUALITIES & WEAKNESS for symptoms.

LESSON PLAN: 3:14

UNIT: III MEDICAL ASSISTANT

TOPIC: TESTING FOR GLUCOSE AND ACETONE IN THE URINE (CLINITEST AND ACETEST)

CLASS: MEDICAL SERVICES ASSISTANT

TYPE OF LESSON: THEORY/SKILL

COMPETENCIES: After this lesson the student will be able to

1. Identify four times a fractional urine specimen is obtained.
2. Describe two SAFETY CONSIDERATIONS used when testing urine with Clinitest and Acetone tablets.
3. Demonstrate the procedure for testing urine with Clinitest and Acetone tablets.
4. Define pronounce, and spell reagent, AC, HS, Clinitest, Acetest, acetone, ketone and fractional urine.

INTRODUCTION:

At times, a Medical Services Assistant will perform tests to monitor a patient's condition. In the case of a diabetic, sugar is not used or broken down properly for the body to use due to the lack of insulin. There is a build up of excess sugar and a waste product (ketones) of the body's improper metabolism in the blood stream. The kidneys filter the blood of the excess glucose and ketones into the urine. The Clinitest and Acetone urine test is a cost effective testing method that can be performed in a medical office or by the patient in his/her home. Today's lesson will demonstrate the importance of performing the test accurately, safely and aseptically.

CONTENT: (pgs. 339 - 343 in DIVERSIFIED HEALTH OCCUPATIONS text).

I. Definitions* - HOLD UP FLASH CARDS

1. Fractional Urine* - Urine specimen collected 1 hour AC* and @ HS*.

CLINITEST & ACETONE LESSON PLAN cont.

- Instruct the patient to discard the first AM's AC voiding.

- A fresh, second AC voiding is used for testing.

2. Reagent* - A substance (Clinitest and Acetest tablet) used in a chemical reaction to determine the presence of another substance (glucose and acetone).

3. Glucose* - Metabolized sugar

4. Acetone* - A ketone body, by-product of fatty acid breakdown. (Uncontrolled diabetics metabolize fat for energy).

5. Clinitest* - Manufacturer's name for reagent tablet used for testing urine for glucose levels.

6. Acetest* - Manufacturer's name for a reagent tablet used for testing urine for acetone/ketone bodies.

II. Procedure; testing urine with Clinitest

(Pages 340 - 342 in DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, text).

1. Gather equipment. Note, test tube must be clean and dry. READ DIRECTIONS ON CLINITEST IF TWO DROPS OR FIVE DROPS OF URINE ARE REQUIRED.

2. Wash hands.

3. Identify the patient & explain procedure.

- Go to the patient 1 hr before test.

CLINITEST & ACETONE LESSON PLAN cont.

- Have patient void & discard that urine.
- Instruct the patient to void again, an hour later.

4. Spread a paper towel on testing surface.

5. Obtain two small paper cups and fill with clean water. Mark one cup "clean" and the other empty cup "rinse."

7. With a clean medicine dropper, obtain water from the cup marked "clean". Drop ten drops of water into a clean, dry test tube.

   (Be sure the water doesn't run down the sides of the tube. This reduces the amt of testing fluid).

8. Depending on the test instructions, drop two or five drops of urine into the test tube.

   (Make sure the urine does not run down the sides of the test tube).

7. Rinse dropper in paper cup filled with "rinse"

8. Open Clinitest foil package without touching the tablet.

   If supplied in a bottle, shake one tablet into the cap without touching the tablet.

   SAFETY CONSIDERATION: TABLET MAY START TO REACT FROM THE MOISTURE OF THE HAND.

9. SAFETY CONSIDERATION: DO NOT HOLD TEST TUBE AT THE BOTTOM. TEST TUBE BECOMES VERY HOT.

1Ø. Drop tablet into test tube.

11. Close lid of bottle immediately as tablets are very sensitive to moisture & will destroy them.

1Ø. Watch reaction for 15 seconds. Do not shake tube during this period.

CLINITEST & ACETONE LESSON PLAN cont.

11. After 15 seconds, shake the tube, gently.

    (See picture on pg. 341 in text).

12. Compare color of the solution with color chart.

13. Record results.

    Patient's name, date, time and results.

    Depending on the agency, results are recorded:

    Negative, 1/4%, 1/2%, 3/4%, etc.

    (The percentage method is most commonly used)

    Or

    Negative, 1+, 2+, 3+, etc.

    Negative is abbreviated Neg - Trace is Tr

14. Pour contents of test tube down the toilet or sink.

15. Clean test tube, dropper & work area.

16. Store Clinitest tablet bottle in a cool, dark and dry area.

17. Wash hands

18. If results are positive, report this to the doctor or your immediate supervisor.

III. Procedure: testing urine with Acetest. (This test is done after Clinitest testing.)

(Pages 342 - 343 in DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, text.)

1. Assemble equipment.

2. Wash hands.

CLINITEST & ACETONE LESSON PLAN cont.

3. Spread a white paper towel for a working surface.

   (Colored paper may interfere with color match testing results).

4. Make sure medicine dropper is clean and dry.

   Flush dropper by obtaining water in "clean" cup and then squirting into "rinse" cup.

   To dry medicine dropper, squeeze bulb & tap tip on paper towel away from immediate work area.

5. Pour Acetone tablet from the bottle into the cap.

   SAFETY CONSIDERATION: DO NOT TOUCH TABLET. IT MAY START TO BURN OR INJURE THE SKIN.

6. Drop one Acetest tablet onto dry white paper.

7. Close the lid of the bottle immediately. (Moisture damages the tablets).

8. Place one drop of urine on the Acetest tablet.

9. Wait 30 seconds.

10. Compare the color of the tablet with the closest square on the Acetone color chart.

11. Record results of the test.

    Patient's name, date, time & results.

    Amount of ketones are recorded as:

    Neg, tr, sm, mod or lg.

12. Discard tablet in the sink drain or trash can.

13. Rinse the medicine dropper as described in Step 4.

14. Clean up the area & replace equipment.

CLINITEST & ACETONE LESSON PLAN cont.

15. Wash hands.

16. Report positive results to the physician or immediate supervisor.

EVALUATION & FEEDBACK

Homework asignment 15:12 on pg 278 in DIVERSIFIED HEALTH OCCUPATIONS WORKBOOK.

Weekly quiz (multiple choice, matching, fill in the blank & essay)

The student will be given a TESTING CLINITEST & an ACETONE EVALUATION SHEET. The student will practice the Clinitest & Acetone testing procedure with a peer until he/she is ready to be checked off by a peer reviewer. The teacher will perform the final evaluation.

MATERIALS NEEDED

Flash cards

Blackboard and chalk

Test tube and rack

White paper & paper towels

Clinitest tablets with color chart

Acetone tablets with color chart

Medicine dropper

Urine in specimen container

Two small cups of water (one clean water and one rinse)

Watch with second hand

Paper and pen

CLINITEST & ACETONE LESSON PLAN cont.

Evaluation sheets: Clinitest & Acetone Testing

Text: DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers

WORKBOOK FOR DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers

EVALUATION SHEET

CLINITEST TESTING

NAME _____ DATE _____

The student will practice the procedure with a peer who will check off each step on the evaluation sheet. The teacher will evaluate the student's final performance.

CODE S = SATISFACTORY R = RECHECK

	PEER REVIEWER	TEACHER
1. Assembles equipment		
2. Washes hands		
3. Reads Clinitest instructions (one or two drop method)		
4. ID patient & explains procedure		
5. Obtains fresh urine specimen		
6. Puts 10 drops of water in test tube without touching inner sides of tube		
7. Puts proper amt of drops of urine in test tube without touching inner sides of tube		
8. Removes tablet from bottle foil wrapper without touching tablet		
9. Drops tablet into test tube		
10. Closes lid of bottle immediately		
11. Holds top of tube or places in rack		
12. Waits 15 sec, shakes tube gently		
13. Compares color of solution to Clinitest color chart		
14. Reads test accurately		
15. Records as Neg, 1/4%, 1/2%, etc.		
16. Cleans & replaces equipment		
17. Washes hands		

129 SIGNATURE

EVALUATION SHEET

ACETEST TESTING

NAME _____ DATE _____

The student will practice the procedure with a peer who will check off each step on the evaluation sheet. The teacher will evaluate the student's final performance.

CODE S = SATISFACTORY R = RECHECK

	PEER REVIEWER	TEACHER
1.	Assembles equipment	
2.	Washes hands	
3.	Lays out white sheet of paper for work area	
4.	Lays Acetest tablet on dry white paper without touching it	
5.	Closes lid of Acetest bottle immediately	
6.	Uses dropper to place one drop of urine on Acetest tablet	
7.	Waits 30 seconds	
8.	Compares color of tablet with Acetest color chart	
9.	Reads test correctly	
10.	Records as Neg, Tr, etc.	
11.	Rinses dropper in water, cleans up area & replaces all equipment	
12.	Washes hands	
	SIGNATURE	

LESSON PLAN: 3:15

UNIT: III MEDICAL ASSISTANT

TOPIC: TESTING STOOL FOR OCCULT BLOOD

CLASS: MEDICAL SERVICES ASSISTANT

TYPE OF LESSON: THEORY/SKILL

COMPETENCIES: After this class the student will be able to

1. Identify why stool is obtained for occult blood.
2. Describe the medical asepsis when testing stool
3. Demonstrate accurately, the procedure for testing stool for occult blood.
4. Define, pronounce and spell; stool, feces, occult and hemorrhoids.

INTRODUCTION:

As a Medical Services Assistant in a physician's office or HMO, you may be responsible for performing tests which will assist the physician in diagnosing a patient's disease or illness. Many times, serious symptoms of a disease are difficult to detect. Today's lesson will demonstrate the procedure for testing for bleeding in the gastrointestinal system. In order to obtain accurate results, this test must be performed correctly.

CONTENT: (pgs. 430 & 431 in the DIVERSIFIED HEALTH OCCUPATIONS text).

I. Definitions *(Hold up flash cards)

a.) Stool* - Medical term for feces* or bowel movement.

b.) Occult* - Greek word, means hidden

- Bleeding in the GI system (gastric ulcer)
- Gastric juices turn blood black. (Black stool may be evidence of blood).

TESTING STOOL LESSON PLAN cont.

- Some foods & iron pills (Ferrous Sulfate) turn stools black.
- If heavy bleeding, blood clots, or blood can be seen on feces.
- Usual origins of frank blood; lower GI system Lg intestine, rectum or anus.

c.) Hemorrhoids*

- Swollen veins found internally (lower rectum) or externally (outside anal opening)

II. Procedure; testing stool for occult blood.

1. Gather equipment.
2. Wash hands.
3. Identify the patient & explain* procedure.

*Some agencies have the patient obtain the specimen at home & mail the card to a lab or to the agency for analysis.

4. Put on disposable gloves.

ASEPTIC CONSIDERATION: LATEX GLOVES ARE WORN TO PREVENT CONTACT OF FECAL MATERIAL. FECES CONTAIN MANY DISEASE CAUSING ORGANISMS.

5. READ DIRECTIONS: Open stool specimen front card cover where specimen is to placed.

TESTING STOOL LESSON PLAN cont.

6. With an applicator, apply a small amt of stool in the specimen area. (See picture on pg 431 in the text). Some stool specimen cards have two specimen areas. Apply second sample from another part of the stool. sample.

7. Close the stool specimen card cover.

8. Turn the card over.

9. Locate a small card opening. (The stool specimen is directly under the paper area exposed).

10. One drop of Hemocult solution is dropped on the area(s).

11. Read precisely @ 30 seconds.

12. A color change (bluish ring) indicates positive results.

13. Discard specimen card & latex gloves in proper trash container.

14. Wash hands.

15. Report and record results.

EVALUATION & FEEDBACK

Weekly quiz (multiple choice, objective, matching & essay)

The student will be given a TESTING STOOL FOR OCCULT BLOOD EVALUATION SHEET. The student will practice the stool testing procedure with a peer until he/she is ready to be checked off by a peer reviewer. The teacher will perform the final evaluation.

TESTING STOOL LESSON PLAN cont.

MATERIALS NEEDED

Flash Cards

Blackboard & chalk

Occult stool specimen card

Tongue depressor

Latex gloves

Hemocult solution

Trash can with lid

Evaluation sheet: Testing Stool For Occult Blood

Text: DIVERSIFIED HEALTH OCCUPATIONS, 2nd edition, by Louise Simmers

EVALUATION SHEET

TESTING STOOL FOR OCCULT BLOOD

NAME_____ DATE_____

The student will practice the procedure with a peer who will check off each step on the evaluation sheet. The teacher will evaluate the student's final performance.

CODE S = SATISFACTORY R = RECHECK

		PEER REVIEWER	TEACHER
1.	Assemble equipment		
2.	Wash hands		
3.	ID the patient & explain procedure		
4.	Put on latex gloves		
5.	Opens specimen card correctly		
6.	Applies stool specimen to correct area(s)		
7.	Closes card lid securely		
8.	Turns card over		
9.	Opens lid where Hemocult solution is to be placed		
10.	Hemocult solution drop(s) on correct area(s)		
11.	Waits exactly 30 sec.		
11.	Reads test accurately		
12.	Discards specimen card & latex gloves properly		
13.	Wash hands		
14.	Reports/records results		
	SIGNATURE		